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ABSTRACT

This collection of 23 papers delivered by a diverse array of participants at a conference on elementary/secondary economics instruction reflects a concern that U.S. students have limited understanding of how or why the U.S. economy operates the way it does. The papers included are: "Economic Education: Leading the Way to Educational Reform" (M. MacDowell); "The State of Economic Literacy in the Schools" (W. Walstad); "Economic Education for the Twenty-First Century: The California Model" (R. Harris); "Implementing Mandates in Economics: A Model and Diagnostic Protocol for Teacher Training" (M. Kourilsky, J. Bruno); "What is High School Economics? The Teachers' Perspective (J. Soper; W. Walstad); "What Can Be Taught in High School Economics Courses?" (P. Heyne); "Is the Curriculum Relevant to the High School Student? (G. Austin); "Economics and the Young Adolescent Learner" (R. Banaszak); "At-Risk Students and Economic Education: Criteria for Evaluation" (J. Brenneke); "Teaching Business Ethics to High School Students" (K. Horn); "Using the Print Media to Teach Economics" (V. Postrel); "Economics and Entrepreneurship Education in the Elementary Grades" (F. Rushing); "Integrating Entrepreneurship in the Secondary Curriculum: Economics and Other Courses" (C. Kent); "The Teaching of Entrepreneurship to Disadvantaged Youth" (S. Mariotti); "The Past, Present and Future in Teacher Education: Economic Education as a Model" (J. O'Neill); "Economic Education in Speech and Debate: Current and Historical Public Policy Debates as Teaching Tools" (G. Rehmke); "Demystifying Economic Education through Partnerships" (P. Harder); "The Role of Business in Economic Education: Old Problems; New Hopes" (A. Finizza); "Obtaining Fund-Raising Partners from the Corporate Sector for Economic Education" (D. Jones); "A Model Partnership Program" (M. Scopatz); "Comparative Economic Systems: Teaching through Overseas Travel" (L. Reed); "ESOP: Employee Economic Education Tool" (W. Peterson); and "Economics is Human Action" (B. Greaves). (PPB)

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PROCEEDINGS OF THE TOWBES CONFERENCE
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The Towbes Foundation

The Towbes Foundation was established by Michael and Gail Towbes in Santa Barbara, California, in 1980. The Foundation provides grants and scholarships in the major areas of medical research, education, promotion of the free enterprise system, and support of the performing arts. It sponsored an international neurological conference on Thyrotrophin-Releasing Hormone (TRH) in Santa Barbara in April 1986. The Foundation has an especially strong interest in education. It provides annual college scholarships for local students through the Santa Barbara Scholarship Foundation and annual grants to the Business Week summer program for high school students.

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Preface

"The Gross National Product," opined one U.S. high schooler in an economic literacy evaluation, "must be the most disgusting product ever produced." Another student solemnly reported that, "Government is more important to the economy because it's government that starts businesses, keeps them up and going."

These are, unfortunately, not isolated anecdotes. In a survey of over 8,200 students, economic education specialists John Soper and William Walstad found that these students had little idea how or why the U.S. economy operates the way it does. Fewer than half understood the role of competition in a market economy and barely half understood what a budget deficit is.

If today's students, many of whom will never attend a college economics course, are to overcome their illiteracy in economics, economics education must become standard fare in the precollege setting.

Over the past decade, increasing numbers of educators, as well as business people, have turned their attention toward instructing students about economics. A number of these individuals gathered to exchange ideas at a conference sponsored by the Towbes Foundation and administered by the Reason Foundation in Santa Barbara from August 10-13, 1988. Betsy Schwammberger of the NFIB Foundation served as chairperson of the conference and Lynn Scarlett of the Reason Foundation served as moderator.

By design, a diverse array of participants attended the conference. These included scholars involved in curriculum design, development of testing and evaluation materials, and teacher training programs; authors of economics education texts; teachers currently instructing students in economic education and entrepreneurship; business people involved in both extracurricular and in-class programs to teach economics; and representatives from institutions specializing in economic education.

These proceedings represent the formal presentations that served as the focal point for discussion at the conference.

Chapter One

ECONOMIC EDUCATION: LEADING THE WAY TO EDUCATIONAL REFORM [1]

By Michael A. MacDowell

The Joint Council on Economic Education was formed in 1949 through an initiative of the Committee for Economic Development, a body of chief corporate executives who wished to pave the way for solid and sound economic growth after the dislocations of World War II. The CED realized its goals could not be reached if the vast majority of Americans continued to be economically illiterate. It also realized that the chief remedy for this crucial shortcoming was to introduce economics into the curriculum of the nation's school systems. True, this process would take time, but if the citizenry was to really understand how to help make the American economy work better, the job had to be done in the country's classrooms.

The foregoing thesis and approach has in more recent times been taken up by the educational reform movement. Today, some 40 years later, the major reason for the many calls for educational reform is to shore up America's economic competitiveness. In fact, the first of the recent calls for massive changes in education, A Nation At Risk (1983), specifically recommended placing greater emphasis on economic education in the schools.

Terrel Bell, the secretary of education who set in motion the process that led to A Nation At Risk, later told the American Association of School Administrators that, "The importance of our economic system and our [related] social institutions receive too little attention in the classroom. Economics is essential in preparing students for the future they will face as citizens of the 21st century."[2]

And the National Commission on Jobs and Small Business, co-chaired by former Presidents Carter and Ford, also recently deplored the lack of knowledge in economics. It stated that "a disquieting number of American high school students . . . do not understand how the American economy works . . . students are unfamiliar with the role of business, government, and labor in the economy; [and they] do not grasp such basics as supply and demand, the importance of trade, and the relationship between productivity and wages."[3]

In the 40 years since the birth of the economic education movement, the Joint Council on Economic Education (JCEE) has learned a great deal about what works and what does not work in bringing a well-grounded understanding of economies to the nation's students.

From what we have learned, certain indisputable conclusions can be drawn. No one has summarized these conclusions better than two of my colleagues, John C. Soper of John Carroll University and William Walstad of the University of Nebraska. According to Soper and Walstad, whose recent work includes the testing of 8,200 randomly selected high school students in conjunction with the development of the Joint Council's new Test of Economic Literacy, achieving high-quality education in economics requires that:[4]

1. A school district must make a commitment to economic education that begins early in elementary grades and spiral upwards throughout the curriculum;
2. All students must receive a course in economics prior to graduation from high school. This "capstone" course both culminates and adds significantly to student learning in the lower grades;
3. Teachers matter. If economics is to be taught, then it must be taught by teachers who have knowledge of the subject and who feel comfortable with it;
4. To this list, one other key element should be added. Because different kinds of students learn differently, the materials and programs in economics we offer to schools must vary. Boys learn differently than girls, students at risk of not graduating learn differently from those who are sure to graduate. No one set of materials, no matter how good, can meet the needs of all the main segments of the student population.

Applying Economic Education's Success to School Reform

We know what works in economic education and, based on this experience, we can probably make some valid recommendations to those engaged in general school reform.[5] Why is economic education especially qualified to do so? For two reasons. First, economics deals with the science of choice and rational decision-making. Therefore, economists are rather uniquely able to design experiments which measure not only the effectiveness, but also the cost of various educational reform agendas. To date, such analyses are noticeably absent from much of the school reform debate.

Second, economic education programs, because they deal in a specific discipline and because of the existence of national instruments for measuring student performance plus a cadre of qualified researchers able to do so, can provide solid experimental bases for testing various school reform recommendations.

The Reform Movement--What Is It?

Three very distinct thrusts of educational reform have emerged in response to A Nation At Risk. These have been best set out by L. Scott Miller, program officer for the Exxon Education Foundation, in an unpublished paper.

The first is a call for higher educational standards. Growing international economic competition and a general sense that educational standards have been eroding since the late 1960s provide the basic impetus for this thrust. Economic research on the origins of productivity growth in various nations that, once again, points to the importance of human capital (roughly speaking, the amount of education workers have) as a catalyst for economic growth and adds further impetus to this aspect of educational reform.

The second thrust is the recommendation that the schools be significantly restructured in a manner that allows students to become more effective "workers" and teachers to truly become professionals. Based on the research of Theodore Sizer, John Goodlad, and others, the advocates of this sort of reform suggest that traditional schooling, which places students in the role of passive learners, is no longer appropriate in an increasingly multicultured society that prides itself on the diversity of its people and the pluralism of its power centers.

The third thrust is the recognition that the student population is changing dramatically. Based on the demographic analyses of Harold Hodgkinson, this recognition may be the most powerful of all because it suggests that students entering the schools today look and act much differently than the entrants of yesteryear. These new, predominantly minority, students are those most likely not to succeed under schooling practices based on the past that still prevail today.

The Issue of Standards: An Economic Imperative

A Nation At Risk, the National Commission on Jobs and Small Business (1987), the National Science Board's Commission on Pre-college Education (1983), and the Report of the National Academy of Sciences (1984), as well as many other reports, do not arbitrarily cite imperative economic reasons for educational reform. There are valid and proven reasons why the quality of a nation's labor force has a significant impact on that nation's ability to remain economically viable and competitive. In the most recent writing on the topic in the June 1988 American Economic Review, Robert Solow reviews various theories of economic growth and states, "All I want to point out is that education per worker accounts for 30 percent of the increase in output per worker and that advance in knowledge accounts for 64 percent."[6]

These figures are backed up by Baumol, Blackman, and Wolff, whose forthcoming book, Productivity and Performance: The Long View, places even stronger emphasis on education. They point out that while elementary level education is a prerequisite for economic growth in underdeveloped countries, a solid secondary education tends to be the prime factor in explaining the relative success and productivity growth rates of more developed countries.

Economic education, and particularly the economics profession, has a significant role to play in bringing home to the American people the importance of education as a prime stimulant for economic growth. And we have the responsibility to remind decision-makers of what the consequences of a lack of standards and achievement in the schools will mean to the future productivity of this country. The need to do so is urgent. The CED reports that primarily because of the failure of the schools, 1 million students will drop out of school by the year 1990 and 700,000 will graduate from high school, but even many of the latter will lack the prerequisite skills to obtain even the most menial form of employment. The economic consequences of this situation are intolerable for a country that wishes to compete effectively.

While some have suggested that the number of dropouts as a percentage of the total student population is no greater today than it was 40 or 50 years ago, it should be the role of the economic educator and the economist to point out that the world of today is significantly different from that of 40 to 50 years ago.[7] When students did not finish high school in 1938, they took jobs in American factories, mills, and mines. Those decent-paying, low-skill jobs are not there any more, and we know that most remaining jobs of this sort are rapidly being lost to low-wage countries.[8]

The plain fact is that those who do not graduate from high school and those that graduate with only tenuous competence at best are almost unemployable. The National Assessment of Education Progress (NAEP) has shown that only 20 percent of graduating high school students can write a letter to a supermarket manager and convince the manager that they are good candidates for a job. Only 12 percent can arrange six common fractions in order of size. Only 4.9 percent can figure out which bus or train to take from Philadelphia in order to get to Washington on a given day at a given time.[9] According to the National Alliance of Business, the result is that business is forced to spend $210 billion a year on formal and informal training, including much remedial instruction.

The workforce implications of this kind of "graduating class" are tremendously unsettling, and so is the social situation that will prevail in a country in which one-fifth of the young people live in poverty and one-third in ignorance.

Besides advocating higher educational standards for self-evident economic reasons, economic educators may have an increasingly direct role to play in the broader social and economic goals of the educational reform movement. A vital basis for the various reports on education that stimulated the education reform movement in the first place is that the country must be economically competitive. To be economically competitive, citizens must know something about the economic system in which they are to compete.

Most Americans do not know much about their economic system. In fact, only about 8 percent have taken economics in school.[10] Without an economic education how can workers of the future act in the best interests of the economic growth potential of their employers; how can voters of the future make the hard decisions that lead to balanced economic growth; and how can consumers of the future "vote" with dollars that reward the most productive firms and penalize those that are not? If we want this country to be competitive, its citizens must know what that term and all its implications mean for themselves, their communities, and their country.

In Japan and West Germany, all students must take economics. In fact, in West Germany entire course sequences in economics are established for students and teachers alike, so that they are familiar with the workings of not only their own economy but those of their competitors.[11] In Japan, all students take a high school economics course in preparation for university entrance exams, and while the exams may seem rote, all Japanese graduates know who Adam Smith was and can recite his basic tenets of competition. Can we say that for the graduates of Thomas Jefferson High?[12]

Restructuring Schools--What Economic Educators Know

In 1969 and again in 1972, the Joint Council sponsored two research training seminars. The Carnegie-Mellon and the Purdue University institutes produced the first generation of economic education researchers. One of the first and most cogent findings of the new generation of researchers was that different students learn in different ways.[13] Girls learn differently than boys. Some students learn faster than others. Some absorb information through listening, some by doing. Economic education researchers also found that the learning of economics is not necessarily related to the amount taught via a particular means. Forcing more of the same kind of learning on a student may not produce optimal results. Rather, allowing different kinds of students to learn economics in different ways, some through books, some through experiential learning, some through hands-on instruction, some through microcomputers, and some through video can produce increased test scores in economics--which most people admit is a difficult subject.

While economic educators made some strides in the field of differentiated learning, the schools, in general, did not put such innovations in effect. "Today's schools were designed to serve the needs of the smoke-stack economy of the 1920s."[14] As John Goodlad stresses, today's schools are organized so as to maximize the a mount of teacher talk and student listening--about 85 percent of the time, and to minimize textbook work--about 15 percent of the time. And what do schools do if some students do not do well with this kind of teaching? They offer more of the same. Raising performance standards in schools does not mean more of the same. Qualitative, not quantitative, changes are needed.

Suppose, as Albert Shanker recently suggested, you go to a doctor and say you're ill. The doctor gives you medicine and three days later you return and say to the doctor, "Not only am I not cured, but the medicine has given me a rash." The doctor doesn't reconsider his treatment but in effect says, "how dare you not be cured! Double the dose and do not bother me again." That is how our schools diagnose and treat learning problems. A good doctor says, "I'm sorry. Most of the time this works. You seem to have some allergic reaction. I will change the medicine and see me in three days. If that doesn't work, we'll try something else."

The best economic education programs in the county follow the method of the good doctor, and therefore provide an exemplary procedure that can be duplicated for other subjects in the curriculum. If a particular sort of class or type of student does not adjust well to the standard teaching program, that program is changed. Economic education offers a wide variety of materials from computer-assisted instruction, to audio-visual programs, to Marilyn Kourilsky's Mini-Society, an experience-based program for teaching economies at the elementary level.

The Joint Council on Economic Education offers three separate high school programs for different kinds of students. The Advanced Placement Instructional Package is a traditional inquiry program principally designed for college-bound students. It maximizes learning in the content of a college principles of economics course, but provides lessons more attuned to the experience of high school students. Capstone: The Nation's High School Economics Course offers a much greater variety of approaches for the traditional high school course, including a number of involvement activities, such as computer-assisted instruction, films, and classroom simulations--all designed to promote an economic way of thinking. Such variations in teaching methods are used in order to interest a wider range of students. And Economics/Entrepreneurship Education (E3) is a high school course that maximizes hands-on learning for economically-disadvantaged students. These students also are given the opportunity to learn at--literally--the elbow of a local entrepreneur.

What we offer in economic education can be a beacon for the rest of education to follow. But we should not become complacent about our own ingenuity. For perhaps as education writer Edward Fisk of The New York Times says, "tinkering with the current system can only go so far."[15] Many countries that need to be less ingenious than the United States about devising appropriate approaches to education because they have more homogeneous populations than we do, have progressed far beyond us in individualizing student learning in specific disciplines such as economics. Other countries are meeting the needs of individual varieties of students by the use of unique methods. In Germany, for example, seven or eight teachers are assigned to a group of 100 students, and stay with those students from fifth grade through high school. This cadre of teachers is therefore able to classify students by individual learning styles, to instruct each style of student appropriately, and to maintain an "institutional knowledge" of how each student learns in different subjects in different ways. No specific class periods are set and hence students progress at their own rate. Most important, teachers take a profound interest in the students and relish the satisfaction that the high level of success rates of students provides.

In America's schools, the opposite is the case. School work resembles office work, but with added obstacles. Imagine an office worker who sits at a table for 45 minutes, listens attentively to a supervisor, and then completes a specific work assignment. When the 45 minutes are up, the supervisor then tells the worker not to talk, under any circumstances, to other nearby workers, and to walk up two flights of stairs. There, the worker spends another 45 minutes doing something else for another supervisor but under the same ground rules. Repeat eight times a day. Viewed in this manner, it becomes quite understandable why students with certain learning capabilities or styles do not succeed in such an environment.

Economic educators have only begun to scratch at the surface of differentiated modes of learning. Nevertheless, their experience so far can be very helpful to others in the education reform movement. Moreover, the more our work in this field aggressively continues, the more we can help others as well as ourselves to "individuate" teaching.

Helping the Truly At Risk

In order for the Chicago school district to qualify for a major foundation grant in 1985, all students in that city had to take an SAT test. The results showed that of the 54 lowest-scoring schools in the greater Midwest area, 34 were in Chicago. In point of fact, only 7 out of every 100 Chicago high school seniors can read at the 12th grade level, and fewer than 50 percent of Chicago's students who do graduate from high school do so by age nineteen.

Why is the situation so poor in Chicago? Relatively speaking, it isn't all that poor. Unfortunately, Chicago's statistics can be matched in New York, Los Angeles, Cleveland, and Detroit. The widespread nature of such poor performance suggests that the roots of the problem lie deeper than in education per se.

James Coleman of the University of Chicago suggests that students entering many of the schools in these cities lack a great deal of the "social capital" that the family, religious, and often the community structure should have provided, and that no amount of "simple" school restructuring is going to make up for these lacks. As evidence for Coleman's contention, this year only 50 percent of kindergarten students at several Chicago elementary schools knew their own first and last names.

The problem is not just one of school dropouts. The problem is apparent with attitudes in the minority population as well. John Ogbu suggests that many middle-class minority students come from families that are, at best, ambivalent or even antagonistic toward school. This may be one of the key reasons why, of the approximately 11,000 llth and 12th graders in the nation who scored 750 or above on the math portion of the SATs in 1985, only 49 were black.

The schools cannot make up for these deficits caused by inadequate preschool education and, most important, socialization. But, economic education may have something of value to say about the problem. One of the key reasons why generations of students from predominantly minority backgrounds fail to do well in school is that early on they feel that they are somehow different and that they have no viable role to play in the economic system. This feeling is manifested in an attitude that almost always assures they will drop out of school. Presumably, many dropouts say to themselves--actually or in effect--why stay in school, a prerequisite to participating in the economy fully, if I have no chance to become part of the economic system? Further, Ogbu and other researchers have spotted a rather interesting characteristic of "at risk" students. Unlike students with normal aspirations, at-risk students tend to internalize failure and externalize success--if they fail, it's their fault; if they succeed, it's due to "luck." Such an attitude poorly serves those who enter an economic system in which a sense of self-worth is a prerequisite for success.

Improving this sense of self-worth is an immense undertaking, but having students feel early on that they can be part of the economic system, that they can excel in school, and that they can indeed be successful in their career choices, should be part of a viable school program. Here economic educators can indeed help.

Choices and Changes, a new Joint Council program for students in grades three, five, seven, and nine is designed to convince students from their early years onward that they can indeed invest in themselves and become part of that economic system in which their parents and communities may well have been relegated to the sidelines. Economics/Entrepreneurship Education--mentioned here earlier--is the high school equivalent to this program.

Summary

Economic education has been improving students' ability to understand the basics of our economic system for forty years. Recently, some genuine success has been realized, but there is still a long way to go in order to make economic understanding universal in this country. Because economic education is a relatively new discipline and because it had to fight so hard for its rightful place in the curriculum, we have learned some lessons about what works in the schools from which the entire educational reform movement might well benefit.

First, since the educational reform movement is in major part grounded in the desire to make the country more competitive, economic educators and economists have a duty to explain to the public that education is indeed a cornerstone of economic growth. Also, educating tomorrow's wage earners, voters, and consumers in the basics of our economic system is one of the best means of helping make the country economically competitive. Knowing about the system in which they are to function and to be competitive is important to students--the fosters of future economic growth.

Second, because much school reform is based on the contention that different kinds of students learn in different ways, the economic education "industry" has a responsibility to share its experiences with the educational establishment as a whole. For years, economic educators have known about differentiated learning and have experimented with--and successfully produced--quality programs that in fact allow different kinds of students to learn in different ways. Economic educators must continue to insist that the variety of programs in their field be available to all schools and school systems, must share their research on differentiated learning objectives with disciplines other than economics, and must be willing and able to act as a long-term experimental "site" for all education. Finally, the demographic changes the nation is experiencing mean that our school population today is different than it was 20 years ago, and that it will look different again 20 years hence. Many students entering school today do not have the backgrounds and are not as socialized for the economic system as their predecessors were. Far too many students do not even aspire to be part of that system. Economic educators can play a significant role in convincing a large majority of these students, beginning in their early years, that they can indeed be part of this economic system--a valued part of it.

FOOTNOTES

1. This paper was originally presented at the "Economics in the Classroom" conference in Santa Barbara, California, August 12, 1988, sponsored by the Towbes Foundation and coordinated by the Reason Foundation. The author would like to thank those at the conference as well as L. Scott Miller for their comments on earlier drafts and William J. Baumol for his thoughts.
2. Education Week, April 1, 1987, p. 1.
3. Making America Work Again, The National Commission on Jobs and Small Business, Washington, D.C., 1987, p. 18.
4. William B. Walstad and John C. Soper, "A Report Card on the Economic Literacy of U.S. High School Students," American Economic Review (May 1988), pp. 255-6.
5. This is not to suggest that the job of economic education is complete. For instance, only 25 percent of the nation's primary and secondary school teachers have ever had a course in economics, according to the Southern Education Board.
6. Robert M. Solow, "Growth Theory and After," American Economic Review (June 1988), p. 314.
7. Chester Finn, "The High School Dropout Puzzle," The Public Interest (Spring 1987), p. 3.
8. Albert Shanker, The New York Times, May 29, 1988, p. 7E.
9. Ibid.
10. "American Public's Knowledge of Business and the Economy," a report given by Frank A. Bennack, Jr., President of the Hearst Corporation, 1984.
11. The German educational ministry recently printed 100,000 copies of an International Monetary Fund (IMF) briefing document for the country's schools because the Fund will be meeting in West Germany this fall. It "sold out." Few American teachers and their students even know the IMF exists.
12. In China in order to qualify for university admission high school students must be able to explain why "gold and silver naturally are not money, but currency is naturally gold and silver." The New York Times, July 12, 1988.
13. The prerequisite and even more important finding of this new generation of research is that teachers make a difference. No material, regardless of its applicability to particular learning styles of various students, can be effective unless the teacher knows the subject and feels comfortable teaching it. (See Soper and Walstad).
14. Adam Urbanski, "Issue," ASCD Update, June 1988, p. 4.
15. Edward Fisk, The New York Times, July 13, 1988, p. B6.

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Chapter Two

THE STATE OF ECONOMIC LITERACY IN THE SCHOOLS

By William B. Walstad

American education in the 1980s can be characterized as an institution in search of literacy. Many studies have documented the problems of student literacy in various subjects. A recent National Assessment of Educational Progress (NAEP) report was issued about high school students' low level of mathematics skills.[1] The poor knowledge of basic science and negative attitudes towards scientific careers was explored in a National Science Board study.[2] Test data showing the inadequate understanding of historical and literary events among American high school students was presented in a book by Diane Ravitch and Chester Finn.[3] In a national best seller, E.D. Hirsch stated the case for more cultural literacy in our society and better educational standards to meet that objective.[4]

The latest target of the literacy campaign is geography. The National Geographic Society recently released the results of a survey that the Gallup Organization conducted for them in nine countries. The results show that students in the United States scored lower than their counterparts in a nine- country survey. U.S. high school students score 6.9 points out a possible sixteen points on a test of identification of sixteen nations and areas in the world. The president of the Society concluded that when it comes to geography, most students are "lost" and "haven't the faintest idea where they are."[5]

In all the studies, there is one type of literacy that seems to be forgotten: economic literacy. I believe that economic literacy deserves more attention in our nation and in the calls for reforms of the school curriculum. This message is not an attempt to jump on the current literacy "bandwagon." That is not necessary because the need for economic literacy has been recognized for at least 30 years in this nation, since the 1961 Report of the National Task Force on Economic Education (Economic Education in the Schools).[6]

The most significant push to date came in the 1970s. There were three campaigns sponsored by business that sought to improve the economic understanding of the American public. The most widely publicized was the Advertising Council's booklets on the American economic system and broadcast ads to try to improve adult knowledge of economics. The Business Roundtable placed a series of advertisements in Reader's Digest to inform people about how the economic system works. The National Association of Manufacturers also conducted a limited advertising campaign to promote understanding of the economic system and the role of government. Although we will never know how effective these economic literacy campaigns were, they demonstrate the importance attached to economic understanding during that turbulent decade of oil stocks and food crises.

What is different about the present movement for literacy is the focus on precollege students rather than adults. The current studies usually examine the performance of high school students, and the related polemics call for reform of the educational curriculum when the test data show student deficiencies. The senior high group is targeted because they represent the future. A low level of literacy in a subject among this group means the future will be bleak; school reform will strengthen the curriculum, increase the level of literacy, and make the future less bleak--or so the arguments go.

George Stigler, in one of the seminal papers in economic education, made a compelling case for economic literacy.[7] His paper should be required reading for anyone in the field of economic education. He presents two basic reasons why economic literacy is more important than other types of literacy-- musical, chemical, or historical. Economic literacy is vital first of all because we are a nation that wants to speak and write about economic issues. These issues affect us in our roles as consumers, workers, producers, and citizens. Most issues in music, chemistry, or history are just not as important to us as individuals or to the nation. Issues in other areas do not involve people to the same degree as economics issues. Economics, therefore, is a topic for general concern and is a subject where the public will benefit from education in its concepts, method, and logic.

The other criteria for Stigler was that economic knowledge might not be susceptible to economical purchase from others. Although business leaders and government officials hire economists when they need technical knowledge, the economic issues that the public faces are less technical and often require the personal weighting of economic goals and objectives. Economic advice may be quite partisan in these matters. The public needs economic education to assess economic issues because it would not be economical to hire economists every time economic decisions need to be made, especially when most decisions are matters of judgment instead of technical advice. In other words, there is a need for "do-it-yourself" economic analysis and the public would benefit from training in this analysis. If there is a case for economic literacy, then a simultaneous problem is defining what it means to be an economic literate. Stigler offers little guidance on this matter other than to state: "The authoritative definition of economic literacy is knowledge of theories which are held by professional economists. Time will eventually reveal that some of those theories are wrong and all are incomplete, but at any one time there is a best scientific view, and this best must be the basis for any appraisal of literacy." [8]

Measuring Economic Literacy

This authoritative definition may not help us measure economic literacy. What theories do we select for testing the public's knowledge? Which group of professional economists do we sample to find out what the public should know? How detailed should the assessment of economic understanding or attitude be? Finding answers to these questions means that we must have an *operational* definition that we can use if we are to be able to measure the public's level of economic literacy. The measure should be a relatively low-cost one so that we can assess large groups in the population.

W. Lee Hansen concluded that there was no definition that provides a useful basis for measuring the construct in his review of measures. What is sought is "a measure which indicates that the level of economic literacy has observable consequences in people's behavior and in their beliefs about the economic system."[9] No instrument fulfills that expectation, although proxy measures have been used to indicate the level of economic literacy. The proxy measures have usually been standardized test scores in economics and public opinion surveys. Hansen questioned the value of standardized tests because the results reflect the mastery of economics obtained through courses in economics and may not be valid measures of economic literacy. He preferred opinion surveys as a proxy measure, and in the remainder of his chapter, discussed how they can be interpreted to provide evidence about the level of economic literacy among adults.

In the current school debate over literacy, however, standardized test scores from secondary students rather than public surveys of adult opinion may be of more value. After all, most of the discussion in the literacy campaign has focused on what students know about a particular subject. This information is useful because it indicates what is and what is not being learned in the schools and provides a basis for suggesting where the curriculum should be reformed. While questions may be raised about the level of test performance (percent correct) that constitutes mastery of a subject, test scores provide an indication of the relative performance of different types of students within a nation or across nations. A test of economic understanding also seems more consistent with Stigler's view of economic literacy as "knowledge of the theories which are held by professional economists" than an opinion survey.

The TEL and TEK

Let me now turn to two nationally normed and standardized tests in economics for the secondary level that provide relevant information on economic literacy in the schools. The first test is the second edition of the *Test of Economic Literacy* (TEL).[10] It was designed to test student understanding of basic economic concepts in the eleventh and twelfth grades. The second test is the *Test of Economic Knowledge* (TEK). It tests similar conceptual understandings, but is targeted at the eighth and ninth grades.[11] The reason that these two tests might be considered adequate proxy measures for economic literacy is that they are based on an authoritative statement by a distinguished group of professional economists about precollege economics. In 1984, the Joint Council on Economic Education published *A Framework for Teaching Basic Concepts*.[12] This document describes a concept structure of economics and identifies 22 basic economic concept categories that should be taught at the precollege level. It became the content validity document for the national tests.

This 1984 *Framework* is a revision of a 1977 version.[13] The origin of the 1977 document goes back to 1961 when the Report of the National Task Force on Economic Education was issued by another "blueribbon" panel of economists that included Paul Samuelson, G.L. Bach, R.A. Gordon, and Lester Chandler. As the thinking of the economics discipline has changed, so has the content validity statement for economic education in elementary and secondary schools. The 1984 version incorporated changes in the structure of the discipline since the 1970s, especially in macroeconomics, and it gave more emphasis to international economics.

Building a standardized test based on this content validity document is no simple task. It requires preparing drafts of questions, field testing of tests, further revisions, a review by a national advisory committee, and finally national norming with a large sample of students. The test construction process is described in detail in the test manuals along with the statistical characteristics of the samples used in the national norming for each test. Further discussions of the test construction methods and TEL pretest and posttest data analysis are provided in William Walstad and John Soper and Soper and Walstad .[14] For our purposes, Table 1 provides a breakdown of the TEL questions and the TEK questions across the 22 concept categories. There are two forms for each test. To simplify the discussion, items from each form have been combined and items common to each form have been counted only once in the totals. The TEL contains 77 unique questions and the TEK contains 58 unique items. These items can then be classified into one of four concept clusters: (1) fundamental; (2) microeconomics; (3) macroeconomics; and, (4) international.

Table 1

TEL and TEK Content Matrix

	TEL Items		TEK Items	
Content Categories	Total*	%	Total*	%
Fundamental Economic Concepts	20	26.0	15	25.9
1. Scarcity				
2. Opportunity cost/trade-offs				
3. Productivity				
4. Economic systems				
5. Economic institutions & incentives				
6. Exchange, money, & interdependence				
Microeconomic Economic Concepts	20	26.0	20	34.5
7. Markets & prices				
8. Supply & demand				
9. Competition & market structure				
10. Income distribution				
11. Market failures				
12. Role of government				
Macroeconomic Economic Concepts	23	29.9	16	27.6
13. Gross national product				
14. Aggregate supply				
15. Aggregate demand				
16. Unemployment				
17. Inflation & deflation				
18. Monetary policy				
19. Fiscal policy				
International Economic Concepts	12	15.6	7	12.1
20. Comparative advantage/barriers to trade				
21. Balance of payments & exchange rates				
22. International growth & stability				
Total Number of Questions	77	100.0	58	100.0

*Items common to forms A and B of a test are counted only once in total.
Source: Table data constructed from data in John C. Soper and William B. Walstad (1987), Test of Economic Literacy (2nd ed.): Examiner's Manual, and William B. Walstad and John C. Soper (1987), Test of Economic Knowledge: Examiner's Manual.

Questions on fundamental economic concepts account for 26 percent of the items on TEL and TEK. Microeconomic items are 26 percent of the TEL questions and 35 percent of the TEK questions. Test questions on macroeconomics are 30 percent of the TEL and 28 percent of the TEK. International items constitute 16 percent of TEL items and 12 percent of TEK. The reason for the slight differences in the composition of the TEL and TEK is because of the difference in the target grade levels for each test. Many macroeconomic and international economic concepts are less likely to be covered and may be less suitable for instruction in junior high school. In junior high school, teachers stress fundamental and microeconomic concepts when they teach economics.

National Test Results

The TEL was administered to 8,205 students in May 1986. The TEK was given to 6,887 students in January and February 1987. This data can be analyzed by percentage of correct responses to the unique items on each test and by the percentage of correct answers to questions in each concept cluster. Further analysis can be conducted by breaking the sample into those students with and without economics training. These results are reported in Table 2.

Table 2

Percent Correct on TEL and TEK Items

Content Category	Overall		With Econ.		Without Econ.	
	TEL	TEK	TEL	TEK	TEL	TEK
	%	%	%	%	%	%
All Items (77/58)	48	45	51	51	40	43
Fundamental (20/15)	53	46	57	53	44	42
Microeconomics (20/20)	52	49	55	54	43	47
Macroeconomics (23/16)	42	40	45	47	34	38
International (12/7)	43	48	45	52	36	45

Note: Number of items is in parentheses. Item data has been combined across forms for (TEL/TEK).
Source: Table data constructed from data in Soper and Walstad (1987) Test of Economic Literacy (2nd ed.): Examiner's Manual and Walstad and Soper (1987) Test of Economic Knowledge: Examiner's Manual.

The data indicate that there is a relatively low level of economic understanding or "economic literacy" as measured by these standardized tests. Overall, eleventh and twelfth grade students answered 48 percent of the TEL items correct while eighth and ninth graders answered 45 percent of the TEK items correct. When a distinction is made for those students with and without economics instruction, the overall percentage correct is still relatively low: 51 percent for those with some economics; 40-41 percent correct for those without any instruction.

Although this latter finding is encouraging because it suggests that economics instruction improves student knowledge of economics (about 8-11 percentage points on a standardized test), even with instruction most students in this nation can answer only about half of the questions on a basic economics test. An understanding of economic concepts and relationships is probably a pre-requisite to the broader type of economic literacy that influences people's behavior and analysis of events as sought by Stigler and Hansen. The low test scores of secondary students provide prima facie evidence of the low level of economic literacy in our schools.

This poor understanding of economics in secondary schools is likely to continue in the adult years. Many high school graduates never go to college, and even if they do, they may not take a college course in the subject. Economics instruction in junior and senior high school may be all the formal education in economics that most students receive. The knowledge gained in secondary school will have a lasting influence on the ability to think about economic issues. Given the poor test performance of our secondary students, it should not be surprising that public surveys of adults show similar results. For example, a recent Hearst report (1984) concluded that: "a large segment of the American public is sadly deficient in its knowledge of basic business and economic facts of life."[15]

The results in Table 2 are also reported by concept clusters to identify those areas where there is relatively better or worse performance. Senior high students do better on fundamental and microeconomic items (53 and 52 percent correct) versus macroeconomic and international economic items (42 and 43 percent correct).

Junior high students do better on fundamental, micro, and international items (46, 49, and 48 percent correct) versus macroeconomic items (40 percent correct). On international items, however, the junior high results are probably overstated because there were just seven items compared with twelve international items on the TEL. These TEK items covered only simple definitions related to trade and did not deal with the more complex topics of exchange rates and comparative advantage that were on the TEL. If more questions covering these topics were on TEK, junior high students would probably do about the same as senior high students.

Economics instruction influences student performance across concept clusters. The data are consistent with what we would expect and with what economic educators would hope to see. Students with instruction should do better than students without instruction. With the senior high data, the differences are greatest in the fundamental and microeconomic areas (+13 and +12 percent) and least in the macroeconomic and international areas (+11 and +9 percent).

The irony in the concept cluster data is that it is on macroeconomics and international economics that much of the public policy debate occurs. Students in these areas show the lowest levels of student performance and the smallest amount of change by instruction. High school students appear to be least prepared to discuss the economic issues and events that most affect our society. Why this situation arises is difficult to determine. The most likely explanation is that economics instruction in high school fails to cover much macroeconomics or international economics content. A related factor may be that teachers feel less capable of teaching these concepts because they have an inadequate knowledge to discuss them in class or they need more instructional materials.

Needs in Educational Reform

So far I have suggested that there is a case for economic literacy that makes it more important than other types of literacy that might be stressed in schools. Nationally normed tests provide a rough proxy measure of this economic literacy. The national test data clearly indicate that the level of economic understanding of secondary students is relatively low. This condition will have serious long-run consequences because adult economic knowledge is highly influenced by the formal instruction provided at the pre-college level.

What can be done to improve the situation? The first recommendation flows from the data presented in Table 2. There is a clear difference in the level of performance between those students with some economics instruction and those students without instruction. One way to increase the economic literacy of students would be to have more students take economics in school. This objective is achieved in other basic subjects by requiring that students take courses. As of 1985 only fifteen states had a mandate requiring that students take a separate course in economics.[16] More states need to make economics a requirement so that students in all school districts are exposed to a formal course in economics before high school graduation. This requirement is made in math, the sciences, English, and other basic subjects, so why shouldn't economics be included in the list?

Having a required course is a necessary but not a sufficient condition for effective economic education in our schools. It should be obvious that the teacher holds the key to what is taught in the classroom. Teachers need to have training in economics and in how to teach it in the junior and senior high school classroom. If teachers do not know the basic economic concepts that are found on the TEL or TEK or feel uncomfortable teaching the subject, then economics may not be taught or, if it is taught, it may be done very poorly. Research in economic education indicates that the more credit courses in economics teachers take, the better students of those teachers do on national tests compared to students of teachers with less coursework.[17] We must find ways to make certain that teachers have the training and knowledge sufficient to teach the economics course.

There must be school commitment to economic education, from the elementary level through the secondary level. Just as with instruction in other basic subjects, students should be taught economics at an early age. It is too late to wait until twelfth grade to start instruction in the subject. Basic economic concepts can and should be taught in the elementary and junior high grades. It may not be possible to teach it as a completely separate subject, but it can be taught as a social studies unit in one of those grades. This type of instruction lays the foundation for the more intensive "capstone" course in senior high school.[18]

We also need more curriculum materials and more concentrated instruction for teachers in certain areas of economics. Students show the lowest level of performance on macroeconomics and international economics. We need to develop more exciting or useful materials in these areas. For example, most of Joint Council on Economic Education materials for teachers and the various Junior Achievement programs for the schools (Applied Economics and Project Business) primarily focus on fundamental and micro concepts, especially the micro concepts.[19] These organizations and others have not made similar investments in teaching students about macroeconomics or international economics.

It has been my experience that courses and workshops for teachers need to give more emphasis to macro and international concepts. It is difficult to expect teachers to teach economic issues in these areas if we do not provide adequate instruction and the necessary curriculum materials. One excuse given for the avoidance of macroeconomics is that the discipline is less settled in what it thinks about macroeconomics than microeconomics. Yet, at precollege level, we are dealing with more basic macro topics and not the esoteric controversies that concern instructors of intermediate macroeconomics. As for international economics, we must not forget this area because it may influence our ability to compete in the world economy.

Conclusion

George Stigler concluded his case by stating: "I do not despair of raising the economic literacy of the American public unless we fall prey to the superficial idea that all that is necessary is a course or two for every young American. We shall have to combine vast efforts and creative experimentations if we are to produce the first economically literate society in history."[20] The challenge to improve economic literacy is a great one. We must make economic education effective in elementary and secondary schools, in colleges, and among the public. The challenge at the precollege level is especially important because that is where economic education begins, and where it may end for many Americans.

Making the case for economics in the school curriculum is more difficult today. Economics seems to have been forgotten in the literacy campaign of the 1980s. Other subjects are capturing the attention of the American public and educational administrators and are receiving more time in the school day. Does this mean that economics is now less necessary than it was once thought to be? I doubt it. The case for economic literacy is just as valid in 1988 as it was in the 1970s.

What is happening is that other disciplines have become more organized. The leaders in those disciplines are better able to express and to document with research findings the need for that subject in the school curriculum. The leaders in economic education and the economics profession have not been as effective. The consequences of this neglect or missed opportunity are becoming more apparent: Economics was not included in the list of tested subjects in the recent reauthorization of the National Assessment of Educational Progress and would have been forgotten completely without a last minute campaign; economic education seems to receive less major attention of the national press; and fewer states are mandating economics instruction than in previous years.

The situation can be changed. Economics can be given more visibility in the national press. It can be included in the next NAEP study. More states can mandate economics instruction in the schools. This change in direction will take more work and cooperation among the leaders and supporters of economic education. It will also require clear documentation on a national, and possibly international scale, of the need for economics in the school curriculum.

FOOTNOTES

1. Associated Press. "Students Found Deficient in Math," Lincoln Journal, June 7, 1988, p. 3.
2. National Science Board Commission on Precollege Education in Mathematics, Science and Technology, Educating Americans for the 21st Century (Washington: National Science Board, 1983).
3. Diane Ravitch and Chester Finn, What Do 17-Year-Olds Know? (New York: Harper and Row, 1987).
4. E.D. Hirsch, Jr., Cultural Literacy: What Every American Needs to Know (New York: Vantage, 1987).
5. New York Times, "Americans Falter on Geography Test," July 28, 1988.
6. Economic Education in the Schools, Report of the National Task Force on Economic Education (New York: Committee on Economic Development, 1961).
7. George Stigler, "The Case, If Any, For Economic Education," Journal of Economic Education 1 (Spring 1970): 77-84.
8. Ibid., p. 83.
9. W.Lee Hanson, "The State of Economic Literacy," in D. Wentworth, et. al., eds., Perspective on Economic Education (New York: Joint Council on Economic Education, 1977), p. 62.
10. John Soper and William Walstad, Test of Economic Literacy (2nd ed.): Examiner's Manual (New York: Joint Council on Economic Education, 1987).
11. Walstad and Soper, Test of Economic Knowledge: Examiner's Manual (New York: Joint Council on Economic Education, 1987).
12. Phillip Saunders, G.L. Bach, James D. Calderwood, and W. Lee Hansen, A Framework for Teaching Economic Concepts (New York: Joint Council on Economic Education, 1984).
13. W.Lee Hansen, et al., A Framework for Teaching Economics: Basic Concepts (New York: Joint Council on Economic Education, 1977).
14. See Soper and Walstad, "What is High School Economics? Posttest Knowledge, Attitudes, and Course Content," Journal of Economic Education 19 (Winter 1988): 37-51; and Walstad and Soper, "What is High School Economics? TEL Revision and Pretest Findings," Journal of Economic Education 19 (Winter 1988): 24-36. See also, Walstad and Soper, "A Report Card on the Economic Literacy of U.S. High School Students," American Economic Review, *Proceedings*, 78 (May 1988): 251-256.

15 Hearst Corporation, The American Public's Knowledge of Business and the Economy (New York: Hearst Corporation, 1984), p. 5.

16. Dennis C. Brennan, A Survey of State Mandates for Economics Instruction, 1985-86 (New York: Joint Council on Economic Education, 1986).
17. Walstad and Soper, 1988.
18. Walstad and Michael Watts, "Teaching Economics in the Schools: A Review of Survey Findings," Journal of Economic Education 16 (Spring 1985): 135-46.
19. See Saunders, et al., p. 70.
20. Stigler, p. 84.

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Chapter Three

ECONOMIC EDUCATION FOR THE TWENTY-FIRST CENTURY: THE CALIFORNIA MODEL

By Robert B. Harris

Economic education is much like a three-legged stool that requires three components in order to be effective. The first requirement is dedicated teachers. Second is staff development, or teacher training in economic education. Third, the teachers must have quality teaching materials. The research shows that all three are required for economics instruction to be effective. It takes motivated, well-trained teachers with high quality instructional materials to make a meaningful difference in students' understanding of economics.

Of course, even with three sturdy legs, the stool cannot stand without a firm foundation. We cannot hope for economic education to succeed without the strong support of school administrators, parents, the business community, economic education groups, the State Department of Education, and the community at large. Providing that foundation must be a cooperative effort of private and public interests.

Once we get the necessary support for teaching economics, we need to plan an implementation approach. High school is too late to begin economics instruction. We must start at an early enough age to make a difference. In fact, kindergarten is not too soon. One of last year's winners in the International Paper Company/Joint Council on Economic Education awards competition was a kindergarten teacher who developed an economics unit for her low-ability group class. Her children ranked far below average in academic ability. At age 5, they had already been evaluated and placed in the bottom academic track for life. Fortunately, she didn't give up on them. By the end of the school year, her students understood the meaning of scarcity, potentially for life. They didn't just memorize terms; rather, they actually understood that we can't have everything we want.

What excites me is that this is not an isolated example. Similar success stories are occurring throughout California and the nation. When I hear critics argue that economics is only for our academically superior students, or that our bottom 20-30 percent cannot handle the concepts, I am reminded of that kindergarten class of slow learners who have grasped a concept that many college economics students seem unable to grasp. We have to be creative enough to adapt our teaching strategies and materials to meet the needs of all of our students. Economics is well suited to reaching students of all ability levels and socioeconomic backgrounds.

The emphasis on problem solving and identifying consequences of actions makes economics ideal for our at-risk students. I have seen inner city second-graders who had never been outside their neighborhoods come alive when their caring, creative teacher taught an economics unit entitled "City Kids Go Country." Her students not only learned some basic economic concepts, but they also learned a lot about animals, people, and cultures outside their neighborhoods through classroom work and a field trip to a dairy farm. For many it was their first sight of a cow or pig. The experience also strengthened their instruction in English, music, and drama, when the students wrote and performed a play about their experiences on the farm. One second-grader whose horizons had been broadened by this dynamic teacher even demonstrated some knowledge of zoology when he wrote about the pigs that he had seen. He wrote in his notebook "A little pig is called a piglet, a Mommy pig is called a sow, and a Daddy pig is called a boar, but to the pig, they don't care who they are; they just a pig."

At the other end of the scale, a middle-school teacher in an affluent suburb asked her sixth-grade research class to do a benefit-cost analysis of the impact of the city's professional football team. Her class looked at private and social benefits and costs, in the sort of sophisticated economic analysis that one might have expected from a college-level class. How much we can expect such innovative teaching experiences to become the norm raises some tough educational planning questions. Before we can even attempt to answer them, we must be sure that we are asking the right questions.

Luckily for those of us in California, I believe that we are asking, and beginning to answer, the proper questions. For example, how can we design an economic education delivery system that will reach all of our students? Until recently, only a handful of California's business and education leaders had considered this question.

Today, the support for economic education is both broad-based and growing. Reflecting increasing concern over declining test scores and increasing dropout rates, California tightened its graduation requirements with SB 813 in 1983, and again in 1985 with SB 1213. The 1983 legislation added economics as part of a three-year high school social studies requirement, followed in 1985 by the requirement that economics be offered as a separate one-semester course, effective in 1988-1989. The changing institutional environment mirrors increasing economics enrollments in California schools. Between 1980 and 1987, economics enrollments nearly quadrupled, during a period in which some other social studies courses experienced declining enrollments. Evidently, many school districts have chosen to add economics voluntarily, even before the imposition of a state economics requirement.

The attractiveness of California's new economics mandate is that it is built on strong support, both political and financial, by the California Business Roundtable, economic education groups, the State Superintendent of Public Instruction, and local school districts throughout the state. This strong coalition throughout California encouraged the legislature to allocate $150,000 as seed money to train additional economics teachers. Actually my being here is evidence of the strength of that coalition. My two-year position with the State Department of Education could not have materialized without full financial support from the Business Roundtable, in cooperation with four major economic education groups. The combined efforts of the California Council for Economic Education, the Foundation for Teaching Economics, the Industry Education Council of California, and Junior Achievement provide a model of cooperation for the rest of the nation to emulate. In short, I believe that California's economics requirement will be a success, because this mandate is part of a groundswell of support for economic education in the state.

Mandates succeed when they draw attention to the need to strengthen economics instruction, and when they provide, or at least attract, the additional resources necessary for curricular reform. They are also more likely to achieve the desired goals when the mandated high school course is a part of an integrated K-12 economics requirement. The California mandate has done all of this. In 1985, the State Department of Education developed model curriculum standards with sixteen recommended economics competencies in microeconomics, macroeconomics, and international trade.[1] Earlier this year, the department published a new History-Social Science Framework that included economics as a separate strand in grades K-12 and outlined the required high school capstone course.[2] A common theme in the state's guidelines for economics is the need to develop alternative strategies to provide economics instruction consistent with the model curriculum standards for all California students. In short, the 1985 economics mandate under SB 1213 was a beginning, rather than the end, to our efforts to promote economics instruction in California schools.

Not only do we have continuing support for economics by those outside the classroom, but we have a growing cadre of dedicated teachers. Furthermore, there are excellent materials available for teaching economics in grades K-12. Finally, staff development is available to teachers, often in the form of subsidized economic education courses.

Although I am optimistic about the future of economic education in California, this is not to say that there are no problems. To push the three-legged stool analogy a bit further, our stool is strong but wobbly. One of the legs, staff development, is shorter than the others. Of course, we could use additional resources for teacher training, but the problem is also lack of awareness among many teachers and administrators of the economic education materials and training opportunities that are already available.

The magnitude of the problem suggests that we have a tough job ahead of us, even with additional resources. A recent study suggests that high school students have a long way to go to achieve economic literacy, yet our future--and their future--is in their hands.[3]

Of greater concern are the problem areas of macroeconomics and international trade--just the areas in which we need to be particularly strong as we enter the 21st century. These are also the areas that tend to be neglected by high school economics teachers, according to a new study.[4]

We live in an increasingly interdependent world--a global economy. Pacific Rim used to mean a few Asian countries plus maybe Australia. Now it includes virtually all of us. How myopic for those of us in California to think that somehow we are not in the Pacific Basin. All we have to do is open our eyes on the freeways and look at the cars around us to see where the competition is. Most of the automobiles on California roads have been foreign for some time. As an example, 54 percent of the May 1988 automobile registrations were foreign. Most of these were Japanese. Conversely, we are exploring ways to promote exports of California rice to Asian countries. Clearly, we are competing in the Pacific Rim.

Unfortunately, our children do not really understand international trade. In a study by William Walstad and John Soper, fewer than one in three realized that if we increased tariffs on imports it would reduce exports as well as imports. Fewer than one in two (44 percent) understood the crucial role of competition in a market-oriented economy such as ours. Barely more than one in three (36 percent) understood that increasing investment is a way to stimulate economic growth. Hardly more than half (56 percent) understood the simplest definition of a government budget deficit--a government spending more than it takes in.

The sample for this study was not a small group of dropouts. It included more than 8,000 students nationwide who were tested over a three-year period. These are the students who in a few years will be running our businesses, labor unions, agricultural organizations, schools, and government. In short, they will be running our economy! Yet they have little idea how it operates, or even why.

They are our biggest group of discretionary spenders, yet they don't even feel that they are part of the economic system. An eighth-grader interviewed several years ago about his role in the economy puzzled over the question for some time before finally replying that his part in the economic system was as a tax deduction for his parents. When asked for a definition of Gross National Product, his classmate responded that it must be the most disgusting product anybody ever made.

I don't mean to suggest that we need to make economists out of all of our children--shades of Frankenstein! Besides, too many economists is bad for the profession's salary structure. But we do need to raise a generation of children with basic economic survival skills. We must provide them with the skills that will make them more intelligent producers, consumers, and voters.

Today's kindergarten class will be the first to graduate in the 21st century. We must provide the skills that will see us through the 21st century and beyond. We have a big job ahead of us. The stool is indeed wobbly. We can stretch the legs that are too short, or we can chop off the leg that is too long, given our lack of resources--the teachers' expectations and dedication. Let's not settle for lowered expectations by our teachers. Let's think of how we can stretch the legs that are too short. That kind of large-scale thinking is increasingly important in today's high-tech, sophisticated, global economy. This is no time to be applying yesterday's answers to tomorrow's problems. The answer is more creativity, not more hand saws.

The good news is that I am picking up an optimistic attitude toward economic education around the state of California...and I like it. Our business leaders, educators, and public officials are quite positive about our ability to make a difference in the economic literacy of our children. More than ever before, I get a feeling that we are all in this together....and I like it! Oh, there are the critics, the pessimists, the naysayers. But their voices are being drowned out by the growing numbers who believe in this cause.

Economic education is a way of thinking, a framework for decision-making, that can increase our adaptability. The world is changing, and we must change with it, unless we want to go the way of the dinosaurs. Ironically, if it happens, we will have done it to ourselves. Years ago, a chairman of the Joint Council on Economic Education said that a nation of economic illiterates can vote the country down the drain and not even know it. Pogo was right--we have met the enemy and he is us.

I mentioned a three-legged stool at the beginning of this essay. Maybe that's too stationary. Perhaps economic education is more like a bicycle. The public and private sectors in partnership provide the two wheels required to make the whole machine work. If you have ever tried riding a unicycle, you know that both wheels are necessary to keep the machine upright. Similarly in economic education, we need a public/private partnership to make things happen. Perhaps of equal importance is the need to keep moving. This is where the stool metaphor fails us. It evokes a stationary image that encourages sitting. We can't do that if we want to compete in a global economy. With an economic education system that is flexible

enough to meet the needs of all California children, we can get off our wooden stools and ride into the 21st century under our own power. And on a bicycle we won't get splinters.

FOOTNOTES

1. California State Department of Education, Model Curriculum Standards, Grades Nine Through Twelve: History-Social Science (Sacramento: Calif. State Department of Education, 1985).
2. California State Department of Education, History-Social Science Framework (Sacramento: Calif. State Department of Education, 1988).
3. Walstad, William B. and Soper, John C. 1988. "A Report Card on the Economic Literacy of U.S. High School Students," American Economic Review, Proceedings 78 (May): 251-256. See also, Soper and Walstad, "What is High School Economics? The Teachers' Perspective," paper presented at the Reason Foundation/Towbes Foundation Conference on Economic Education, Santa Barbara, CA, August 10-13, 1988.
4. William Baumol and Robert Highsmith, "Variables Affecting Success in Economic Education: Preliminary Findings from a New Data Base," American Economic Review, Proceedings 78 (May 1988): 257-262.

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Chapter Four

IMPLEMENTING MANDATES IN ECONOMICS: A MODEL AND DIAGNOSTIC PROTOCOL FOR TEACHER TRAINING

By Marilyn Kourilsky and James E. Bruno

Awareness of the value of economics instruction at the high school level is growing in importance in American public education. To date 27 states have mandated inclusion of some form of economic education in the high school curriculum as a graduation requirement. These mandates range from separate courses in economics in conjunction with compulsory competency tests, to infusion strategies in which economics is integrated into other social studies courses.

The research literature on current economic education at the high school level suggests that youngsters throughout the country are primarily mastering economic concepts only at the recall level (as opposed to higher levels) of cognition.[1] One of the reasons for this dilemma is that most of the teachers of these youngsters do not understand economics beyond a recall or "regurgitate" level. Although approximately 213,000 teachers will be called upon to instruct 14,772,000 high school students in economics by 1988 as a direct result of state mandates, less than 5 percent of those teachers will have majored in economics. It therefore seems apparent that we must deliver more effective economic education programs for the teachers themselves--programs that will enable them not only to meet minimum mandated requirements, but also to help establish an economically literate citizenry.

Currently, there is no well-defined prototypical model for implementing a state mandate to teach economics. Rather, most state mandates are implemented in an ad hoc tactical fashion with little or no strategic focus. The purpose of this paper is to take a step toward providing this focus through the presentation of a model for the training of economics teachers, especially those who must deliver state-mandated economic education.

First, guidelines for effective teacher training are proposed. Second, a model in which the guidelines are met is offered, and finally a case study is presented that substantiates the effectiveness of the model. Of particular interest is the introduction into economic education training of an innovative diagnostic protocol called Information Referenced Testing (IRT), which uses a scoring procedure called Modified Confidence Weighted-Admissible Probability Measurement (MCW-APM).[2]

A key instructional objective of any training program, especially one in economics, is to insure that the trainee leaves the training program with more reliable information, less misinformation, and more confidence in accurate information in their knowledge base. To meet these instructional challenges, the following four guidelines for effective teacher training are proposed.

Guidelines Necessary for Effective Teacher Training

First, trainers need to assess the state of knowledge or information in the information base of trainees. The major problem and challenge for the trainer(s) is to pinpoint concept areas where misinformation, lack of information, and incomplete information exists in the knowledge base of the trainee so they can be remediated and addressed by the training program. Thus the assessment ideally should include measures both of the recognition of correct information as well as the confidence in that recognition. Also, the assessment should provide trainers with the information to "fine tune" and individualize the training program curricula in order to meet the unique knowledge base configurations of the particular group or class of trainees. Second, trainers need to create a situation where trainees can help themselves learn and, in cooperative or conventional learning environments, exhibit their own personal information-seeking behavior. Third, trainers need to create a flexible learning environment, where trainees, based on the diagnosis of their initial state of knowledge, can be brought up to the profession's "standard of care." Finally, an effective training program should include a detailed follow-up of information and instructional materials (and even one-on-one instruction) for trainees who are still not confident or remain misinformed after the training program terminates.

The following is a description of a model (and a case study) in which these guidelines are met.

A Model for Teacher Training in Economics: UCLA/CCEE Project

The first step in the project was a 30-hour economic education training seminar which was held on the campus of UCLA. Thirty-one high school teachers attended the workshop. They came from communities as far north as San Rafael and Fremont in the San Francisco Bay Area and as far south as San Diego. They were selected by Center Directors throughout California on the basis of already demonstrated pedagogical talent in classroom instruction. The challenge was to select teachers who eventually could serve as mentors and leaders in a team effort to train other teachers throughout California. It was critical that these leaders have reliable information and knowledge of the discipline.

During the first seminar's session on Monday morning participants were taught how to use the Information Referenced Test Scoring procedure called MCW-APM.[3] They were then given the Test of Economic Literacy, an instrument developed, standardized and published by the Joint Council on Economic Education. Students used both the traditional right-wrong/forced choice format as a criterion referenced test and the MCW-APM format as an information referenced test simultaneously. Tests were scored and the results were available to the trainer and trainees two hours later. The trainer received the pretest assessment report which itemized students and topics into a variety of categories, among which were the following:

1) A total item analysis for all students by information type was provided. It included a class summary of the number of students who were fully informed, well-informed, partially informed, uninformed or misinformed on the general body of economic information tested, with percentages given for each category. (54 percent of the class was fully informed, 9 percent well-informed, 15 percent partially informed, 10 percent uninformed, 3 percent near misinformed, and 9 percent fully misinformed.

2) A test item-by-test item (concept-by-concept)-list of the various categories showing class percentages for each item was included. (For example, 73 percent of the students had full information on collective bargaining, 27 percent of the class was partially informed on money supply, and 47 percent of the class were uninformed on the concept of Gross National Product.)

3) Rank ordering of concepts tested (taxes, GNP, supply, etc.) by MCW-APM categories were provided. For example, taxes ranked number 1 in the list of partially informed questions, money and banking ranked number 2 in this category. Beside each concept, within each category was its rank order, percentage of students partially informed on the topic, its test item number, and the chapters from the two required texts that discussed the particular topic.

Thus the first guideline for effective teacher training, assessing the state of knowledge in the information base of the trainees, was met. Through use of the Information Referenced Testing, each participant was assessed for information type in each of the concepts deemed necessary for economic literacy. The necessary data to "fine tune" and individualize the training program curricula were generated.

Prescriptions were tailored for each trainee to meet the second guideline for effective teacher training--creating an environment where students can help themselves learn. Every student in the class received an individual printout of his/her pretest scores, i.e., an Individual Education Plan (IEP). It itemized overall performance as well as performance on each item of the test with cross reference to instructional materials. Diagnostic prescriptions refering the student to appropriate chapters in the required textbooks were offered for all concepts missed. The students therefore were able at their own pace to work on an individually prescribed educational plan. Each participant could exhibit his/her own personal information-seeking behavior. In addition the instructor, who also had a copy of every student's individual prescription, could use the individual plans as well as the group and class feedback to map out appropriate instructional experiences.

In conformance with the third guideline for effective teacher-training--creating a flexible learning environment where student's knowledge levels can be brought up to the profession's "standard of care" (in this case, to establish economic literacy)--students were divided into one of the following three groups. This assignment was based on their reliable (accurate and confident) information.

Group 1 (20 percent of the class) had achieved "full mastery" on the pre-test. Therefore, the instructional goal for this group was to enrich their economic understanding (since they were already well-informed) and to role-model alternative pedagogical techniques that they could then use with their own students.

Group 2 (43 percent of the class) had not achieved mastery. Most were partially informed and a few were uninformed. The primary instructional goal for this group was to fill in the gaps in their economic understanding. Therefore, much basic instruction and review were needed. Economic concepts were divided into three categories for this group with the suggestion to the instructor to "reeducate," "review," or "instruct" in the given concept areas. For example, scarcity was ranked number 1 in both the "reeducate" and "instruct" categories, while diminishing returns was ranked number 1 under the "review" category.

Group 3 (37 percent of the class) had a great amount of misinformation in its knowledge base. Reeducation was needed in a number of concept areas. The major instructional challenge for the group was to correct the misconceptions of the misinformed. This group was the most intriguing pedagogically and was given a treatment designed to "purge" the economic misconception(s) that led to the misinformation.

At the end of the training, all participants took the Test of Economic Literacy posttest (a different form from the pre-test). Results were ready for them the next morning, the last session of the workshop. The effect of the implementation was a dramatic increase in economic literacy among all trainees as well as an increase in their confidence levels with respect to their understanding. Eighty-four percent of the students were fully informed, whereas only 1 percent fell into the category of the uninformed.

In summary, a strategic use of IRT testing with information based formative and summative evaluation in economic education training programs may provide a cost-efficient method to (1) assess initial information needs or formative evaluations of trainees, (2) fine tune training curriculum to specific needs of the trainees, (3) provide feedback of how the training program is delivering reliable information and finally, (4) provide a summative evaluation of trainee performance based on reliable information, recognition and confidence. The IRT analysis can provide five important outputs for economics education trainees. The most important of these outputs is the IEP or information-based formative evaluation for each student (see Figure 1 and 2). This IEP depicts those pre-training areas where the student is misinformed, uninformed, or partially informed. It also associates instructional resources for each concept so that the student can correct (on his/her own) areas of unreliable information.

The second part of the IRT analysis is the definition of the training protocol based on the information profile of the trainees (see Figure 3). Common trainee areas of misinformation and lack of information and partial information across students can then be addressed more systematically with classroom instruction.

A third part of the IRT analysis is an examination of pre- versus posttest results on each concept deemed necessary for economic literacy and a summary of the pre/post informative state profiles in the form of a cognitive map (see Figure 4). Finally, a summative evaluation of each student is provided. This assessment may be used for certification and selection to additional programs in economic education and consists of an IRT statistic that measures the confidence in correct information across all test items (see Figure 5).

In conformity with the final guideline of effective teacher training--providing follow-up opportunities for enhanced learning subsequent to the training program--each participant receives another individual diagnostic prescription indicating areas of strengths and weaknesses. In the case of the CCEE/UCLA project the teachers (and their students), at present and throughout the school year, are being monitored. Also, the students of these teachers are being tested for economic understanding to ascertain to what degree, if any, misinformation of the teachers is conveyed to their students. Finally, all the above teachers will participate in a follow-up workshop, and some of them will be selected to be further trained as mentor teachers in economics for purposes of staff development.

The above teacher-training model, which is replicable, showed qualitative results which strongly suggest significant benefits in the areas of effectiveness of training and reliability of training. Also, the ratio of successful conveyance of economic information and trainee confidence in that information, relative to the cost of training, indicates a higher benefit-cost ratio (concept acquisition per unit of training time) for the above described model/protocol than for the approaches of previous training workshops (given over the last two years) designed to achieve the same goals.

REFERENCES

Bruno, J.E. (1986). Assessing the Knowledge Base of Students: An Information Theoretic Approach to Testing," Measurement and Evaluation in Counseling and Development 19 (3).

Bruno. J. E. (1987). Admissible Probability Measurement in Instructional Management, Journal of Computer Based Instruction 14 (2).

Kourilsky, M. (May 1983). Understanding Economics: Overview for Teachers, Experiences for Students. Addison-Wesley Publishing Company.

Saunders, P. (1980)." The Lasting Effects of Introductory Economics Courses," Journal of Economic Education 12 (1): 1-14.

FOOTNOTES

1. P. Saunders, "The Lasting Effects of Introductory Economics Courses," Journal of Economic Education 12, No. 1 (1980): 1-14.

2. J.E. Bruno, J. E., "Assessing the Knowledge Base of Students: An Information Theoretic Approach to Testing," Measurement and Evaluation in Counseling and Development 19, No. 3 (1986).

3. Briefly, for a student taking a test with MCW-APM, confidence in one of three choices to a test item is spatially (and visually) represented on a response triangle. Each one of the three vertices on the triangle indicate 100 percent certainty in one of the three choices. Letters on each of the three sides of the triangle indicate partial confidence in two of the choices on that side (enough information such that one choice is eliminated). One letter, specially equidistant from each of the three vertices (center of the triangle), indicates each choice is possible because of lack of information on how to answer the question (see Figure 6 and 7). When instructing students in the MCW-APM procedure the students themselves derive the response triangle so they can see the relationship between their answer and their confidence in that answer. The point awards for the various levels of confidence in an answer is specifically designed to insure congruence between the conforming strategy of the test developer and the point maximizing of the student. The main objective of MCW-APM scoring is to minimize distortions in test scores introduced by the need of students to guess in order to maximize their score. Students are free to answer test items in less restrictive environments and can use various response letter options that indicate "I know," "I don't know," and "I am not sure." Points are only deducted for information known wrongly, partial credit is awarded for partial knowledge and no points are awarded or deducted for no information.

The MCW-APM test scoring procedure references student attainment to an information based standard of mastery which varies on a continuum from being fully informed (100 percent confident and correct) to fully misinformed (100 percent confident and incorrect).

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                         SHORT FORM
       ***IRT BASED INDIVIDUAL(RECEPTOR) EDUCATION PLAN**#

 NAME:
 CLASS I.D. PRE-  -ECONED
 EXAM NAME  ECONOMIC LITERACY EXAMINATION -ELCC
 NUMBER OF QUESTIONS          30
--------------------------------------------------------------------

--------------------------------------------------------------------

        STUDENT MISINFORMED ITEMS ON EXAMINATION
(these were the concepts where you were sure of the answer but were
 incorrect-have your instructor explain why the answer you thought was
 correct was wrong and why another answer was correct)

ITEM (INF STATE)   DESCRIPTION -INSTRUCTIONAL CROSS REFERENCE

         4 M       PROFIT
                   K&D CH 7   K CH 4
        13 M       GRAPHICAL INTERPRETATION
                   K&D CH 11
        19 M       INFLATION
                   K&D CH 13   K CH 5
        22 M       MONEY-BANKING
                   K&D CH 12   K CH 5
        25 M       RESOURCE ALLOCATION
                   K&D CH 11

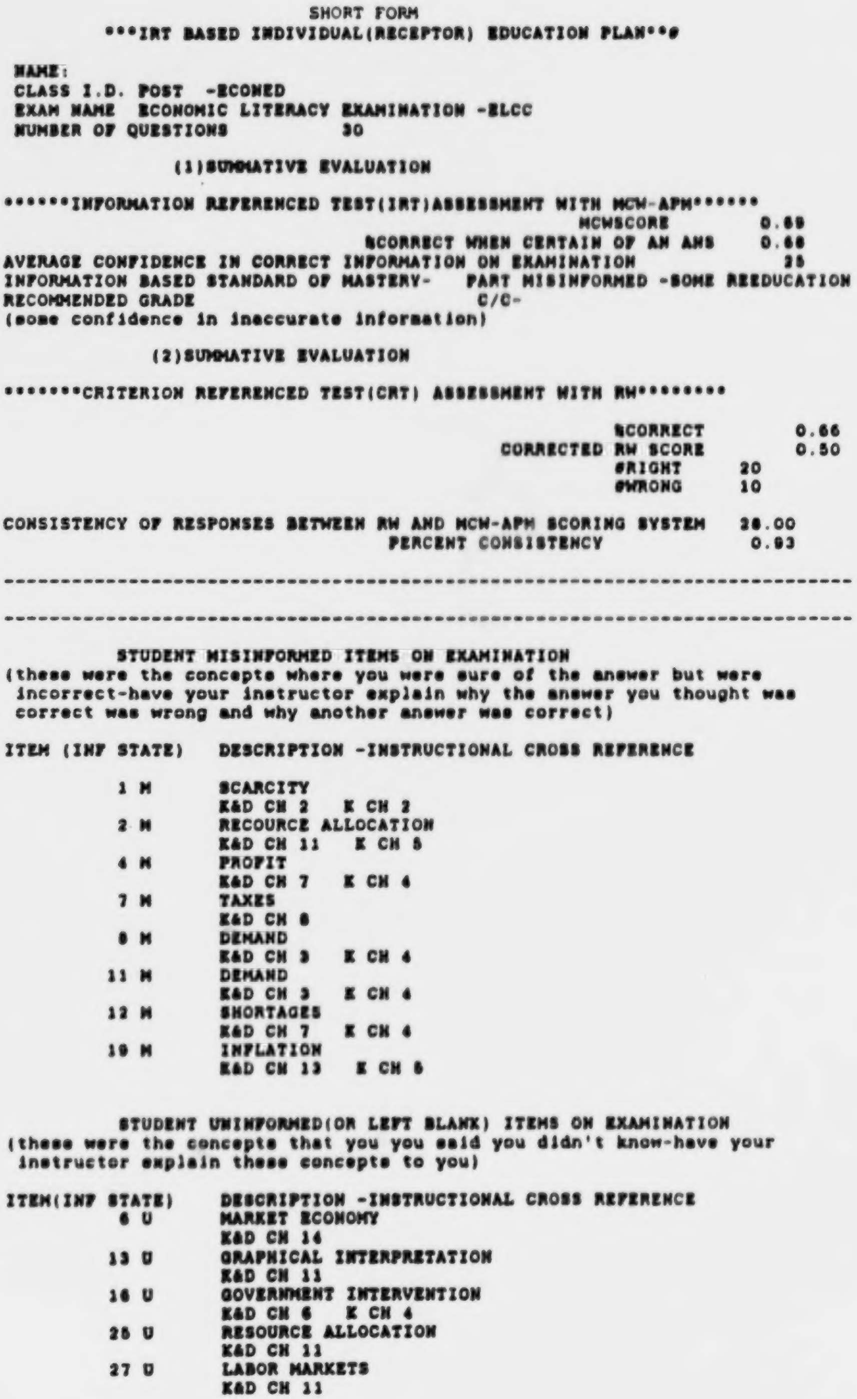

        STUDENT UNINFORMED(OR LEFT BLANK) ITEMS ON EXAMINATION
(these were the concepts that you you said you didn't know-have your
 instructor explain these concepts to you)

ITEM(INF STATE)    DESCRIPTION -INSTRUCTIONAL CROSS REFERENCE
         1 U       SCARCITY
                   K&D CH 2   K CH 2
         2 U       RECOURCE ALLOCATION
                   K&D CH 11   K CH 5
         5 U       BUSINESS REVENUE
                   K&D CH 11
         6 U       MARKET ECONOMY
                   K&D CH 14
         7 U       TAXES
                   K&D CH 8
         9 U       COMPETITIVE MARKETS
                   K&D CH 6   K CH 4
        10 U       SUPPLY
                   K&D CH 6   K CH 4
        12 U       SHORTAGES
                   K&D CH 7   K CH 4
        14 U       MONOPOLY
                   K&D CH 7   K CH 4
        16 U       GOVERNMENT INTERVENTION
                   K&D CH 6   K CH 4
        17 U       DEMAND
                   K&D CH 6   K CH 4
        21 U       G.N.P. INTERPRETATION
                   K&D CH 11
        26 U       CONSUMERISM
                   K&D CH 11
        28 U       INVESTMENTS
                   K&D CH 11


        STUDENT PARTIALLY INFORMED ITEMS ON EXAMINATION
(these were the concepts where you weren't positive of the answer-have
 your instructor review these concepts with you )
ITEM(INF STATE)    DESCRIPTION -INSTRUCTIONAL CROSS REFERENCE
         3 P       DIMINISHING RETURNS
                   K&D CH 9
        30 P       NATURE OF THE FIRM
                   K&D CH 2
```

Figure 1

Pretest IEP



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                         SHORT FORM
       ***IRT BASED INDIVIDUAL(RECEPTOR) EDUCATION PLAN**#

 NAME:
 CLASS I.D. POST  -ECONED
 EXAM NAME  ECONOMIC LITERACY EXAMINATION -ELCC
 NUMBER OF QUESTIONS          30

             (1)SUMMATIVE EVALUATION

******INFORMATION REFERENCED TEST(IRT)ASSESSMENT WITH MCW-APM******
                                               MCWSCORE        0.69
                              %CORRECT WHEN CERTAIN OF AN ANS    0.68
AVERAGE CONFIDENCE IN CORRECT INFORMATION ON EXAMINATION          25
INFORMATION BASED STANDARD OF MASTERY-   PART MISINFORMED -SOME REEDUCATION
RECOMMENDED GRADE                         C/C-
(some confidence in inaccurate information)

           (2)SUMMATIVE EVALUATION

*******CRITERION REFERENCED TEST(CRT) ASSESSMENT WITH RW*********

                                                 %CORRECT          0.66
                                       CORRECTED RW SCORE          0.50
                                                 #RIGHT      20
                                                 #WRONG      10

CONSISTENCY OF RESPONSES BETWEEN RW AND MCW-APM SCORING SYSTEM   28.00
                                PERCENT CONSISTENCY               0.93

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          STUDENT MISINFORMED ITEMS ON EXAMINATION
(these were the concepts where you were sure of the answer but were
 incorrect-have your instructor explain why the answer you thought was
 correct was wrong and why another answer was correct)

ITEM (INF STATE)   DESCRIPTION -INSTRUCTIONAL CROSS REFERENCE

          1 M      SCARCITY
                   K&D CH 2   K CH 2
          2 M      RECOURCE ALLOCATION
                   K&D CH 11   K CH 5
          4 M      PROFIT
                   K&D CH 7   K CH 4
          7 M      TAXES
                   K&D CH 8
          8 M      DEMAND
                   K&D CH 3   K CH 4
         11 M      DEMAND
                   K&D CH 3   K CH 4
         12 M      SHORTAGES
                   K&D CH 7   K CH 4
         19 M      INFLATION
                   K&D CH 13   K CH 5


          STUDENT UNINFORMED(OR LEFT BLANK) ITEMS ON EXAMINATION
(these were the concepts that you you said you didn't know-have your
 instructor explain these concepts to you)

ITEM(INF STATE)    DESCRIPTION -INSTRUCTIONAL CROSS REFERENCE
          6 U      MARKET ECONOMY
                   K&D CH 14
         13 U      GRAPHICAL INTERPRETATION
                   K&D CH 11
         16 U      GOVERNMENT INTERVENTION
                   K&D CH 6   K CH 4
         25 U      RESOURCE ALLOCATION
                   K&D CH 11
         27 U      LABOR MARKETS
                   K&D CH 11
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Figure 2

Posttest IEP

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ECONOMIC LITERACY EXAMINATION -MCM-APM WITH RW PRE TEST JUNE 1987         ELCC

EXAMINATION DATE: 06-21-87
MCM-APM-CURRICULUM ANALYSIS
EVALUATION OF THE SIGNAL FROM INSTRUCTION -BE SURE TO ASCERTAIN IF PROBLEM IS
CURRICULAR(INSTRUCTION) OR PSYCHOMETRIC(TEST ITEM
THE SORTED MISINFORMED QUESTIONS
RANKING   PERCENTAGE   TEST ITEM NUMBER
       1        0.20          2   RESOURCE ALLOC      K6D CH 11     K CH 5   2
       2        0.20          7   TAXES               K6D CH 8                7
       3        0.17          3   DIMISH RETURN       K6D CH 9                3
       4        0.13         13   GRAPH INTER         K6D CH 11              13
       5        0.13         22   MONEY -BANKING      K6D CH 12     K CH 5  22
       6        0.13         23   MONEY SUPPLY        K6D CH 12     K CH 5  23
       7        0.10         21   G.N.P.INT           K6D CH 11              21
       8        0.10          4   PROFIT              K6D CH 7      K CH 4   4
       9        0.10          1   SCARCITY            K6D CH 2      K CH 2   1
      10        0.10         25   RESOURCE ALLOC      K6D CH 11              25
      11        0.10         29   COLL BARG           K6D CH 10              29
      12        0.10         30   NATURE OF FIRM      K6D CH 2               30
      13        0.07         12   SHORTAGES           K6D CH 7      K CH 4  12
      14        0.07          9   COMP MARKETS        K6D CH 6      K CH 4   9
      15        0.07         19   INFLATION           K6D CH 13     K CH 5  19
      16        0.07         28   INVESTMENTS         K6D CH 11              28
      17        0.07         20   G.N.P.DEF           K6D CH 11              20
      18        0.07         10   SUPPLY              K6D CH 5      K CH 4  10
      19        0.03          6   MARKET ECON         K6D CH 14               6
      20        0.03          8   DEMAND              K6D CH 3      K CH 4   8
      21        0.03         14   MONOLOPIES          K6D CH 7      K CH 4  14
      22        0.03         15   COMPETITION         K6D CH 2      K CH 3  15
      23        0.03         24   GOV BUD DEFICITS    K6D CH 14              24
      24        0.03          5   BUS-REVENUE         K6D CH 11               5
      25        0.03         17   DEMAND              K6D CH 6      K CH 4  17
      26        0.03         18   LABOR DEMAND        K6D CH 10              18
      27        0.03         11   DEMAND              K6D CH 3      K CH 4  11
      28        0.0          16   GOVT INTERVENT      K6D CH 6      K CH 4  16
      29        0.0          26   CONSUMERISM         K6D CH 11              26
      30        0.0          27   LABOR MARKETS       K6D CH 11              27

THE SORTED INFORMED QUESTIONS
RANKING   PERCENTAGE   TEST ITEM NUMBER
       1        0.87          8   DEMAND              K6D CH 3      K CH 4   8
       2        0.83         13   GRAPH INTER         K6D CH 11              13
       3        0.73         19   INFLATION           K6D CH 13     K CH 5  19
       4        0.73         24   GOV BUD DEFICITS    K6D CH 14              24
       5        0.73         26   CONSUMERISM         K6D CH 11              26
       6        0.73         29   COLL BARG           K6D CH 10              29
       7        0.73         30   NATURE OF FIRM      K6D CH 2               30
       8        0.70          1   SCARCITY            K6D CH 2      K CH 2   1
       9        0.67         17   DEMAND              K6D CH 6      K CH 4  17
      10        0.63         11   DEMAND              K6D CH 3      K CH 4  11
      11        0.63         10   SUPPLY              K6D CH 5      K CH 4  10
      12        0.60         15   COMPETITION         K6D CH 2      K CH 3  15
      13        0.60         27   LABOR MARKETS       K6D CH 11              27
      14        0.57         16   GOVT INTERVENT      K6D CH 6      K CH 4  16
      15        0.53         14   MONOLOPIES          K6D CH 7      K CH 4  14
      16        0.53          2   RESOURCE ALLOC      K6D CH 11     K CH 5   2
      17        0.50         18   LABOR DEMAND        K6D CH 10              18
      18        0.50          9   COMP MARKETS        K6D CH 6      K CH 4   9
      19        0.50         20   G.N.P.DEF           K6D CH 11              20


      21        0.47          4   PROFIT              K6D CH 7      K CH 4   4
      22        0.40         12   SHORTAGES           K6D CH 7      K CH 4  12
      23        0.40         28   INVESTMENTS         K6D CH 11              28
      24        0.37          3   DIMISH RETURN       K6D CH 9                3
      25        0.33          7   TAXES               K6D CH 8                7
      26        0.33         21   G.N.P.INT           K6D CH 11              21
      27        0.30         25   RESOURCE ALLOC      K6D CH 11              25
      28        0.27         22   MONEY -BANKING      K6D CH 12     K CH 5  22
      29        0.27         23   MONEY SUPPLY        K6D CH 12     K CH 5  23
      30        0.27          5   BUS-REVENUE         K6D CH 11               5
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Figure 3

Class Information Profile

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THE SORTED PARTIALLY INFORMED QUESTIONS
RANKING    PERCENTAGE    TEST ITEM NUMBER
      1         0.30             7   TAXES                K&D CH 8                7
      2         0.30            22   MONEY -BANKING       K&D CH 12     K CH 5   22
      3         0.30            25   RESOURCE ALLOC       K&D CH 11               25
      4         0.27            20   G.N.P.DEF            K&D CH 11               20
      5         0.27             5   BUS-REVENUE          K&D CH 11                5
      6         0.27            23   MONEY SUPPLY         K&D CH 12     K CH 5   23
      7         0.27            12   SHORTAGES            K&D CH 7      K CH 4   12
      8         0.23            11   DEMAND               K&D CH 3      K CH 4   11
      9         0.23            28   INVESTMENTS          K&D CH 11               28
     10         0.20            18   LABOR DEMAND         K&D CH 10               18
     11         0.20             3   DIMISH RETURN        K&D CH 9                 3
     12         0.17             2   RESOURCE ALLOC       K&D CH 11     K CH 5    2
     13         0.17             4   PROFIT               K&D CH 7      K CH 4    4
     14         0.17            15   COMPETITION          K&D CH 2      K CH 3   15
     15         0.13             9   COMP MARKETS         K&D CH 6      K CH 4    9
     16         0.13            27   LABOR MARKETS        K&D CH 11               27
     17         0.13             6   MARKET ECON          K&D CH 14                6
     18         0.10             1   SCARCITY             K&D CH 2      K CH 2    1
     19         0.10            19   INFLATION            K&D CH 13     K CH 5   19
     20         0.10            26   CONSUMERISM          K&D CH 11               26
     21         0.10            16   GOVT INTERVENT       K&D CH 6      K CH 4   16
     22         0.10            17   DEMAND               K&D CH 6      K CH 4   17
     23         0.10            29   COLL BARG            K&D CH 10               29
     24         0.07            21   G.N.P.INT            K&D CH 11               21
     25         0.07            14   MONOLOPIES           K&D CH 7      K CH 4   14
     26         0.07            30   NATURE OF FIRM       K&D CH 2                30
     27         0.03            10   SUPPLY               K&D CH 5      K CH 4   10
     28         0.03             8   DEMAND               K&D CH 3      K CH 4    8
     29         0.03            24   GOV BUD DEFICITS     K&D CH 14               24
     30         0.0             13   GRAPH INTER          K&D CH 11               13

THE SORTED UNINFORMED QUESTIONS
RANKING    PERCENTAGE    TEST ITEM NUMBER
      1         0.47            21   G.N.P.INT            K&D CH 11               21
      2         0.20            14   MONOLOPIES           K&D CH 7      K CH 4   14
      3         0.20            10   SUPPLY               K&D CH 5      K CH 4   10
      4         0.17             3   DIMISH RETURN        K&D CH 9                 3
      5         0.17             5   BUS-REVENUE          K&D CH 11                5
      6         0.17             6   MARKET ECON          K&D CH 14                6
      7         0.17            23   MONEY SUPPLY         K&D CH 12     K CH 5   23
      8         0.17            27   LABOR MARKETS        K&D CH 11               27
      9         0.13            25   RESOURCE ALLOC       K&D CH 11               25
     10         0.13            26   CONSUMERISM          K&D CH 11               26
     11         0.13            22   MONEY -BANKING       K&D CH 12     K CH 5   22
     12         0.13            28   INVESTMENTS          K&D CH 11               28
     13         0.10            16   GOVT INTERVENT       K&D CH 6      K CH 4   16
     14         0.10            18   LABOR DEMAND         K&D CH 10               18
     15         0.10             9   COMP MARKETS         K&D CH 6      K CH 4    9
     16         0.07            24   GOV BUD DEFICITS     K&D CH 14               24
     17         0.07            11   DEMAND               K&D CH 3      K CH 4   11
     18         0.07             4   PROFIT               K&D CH 7      K CH 4    4
     19         0.07             7   TAXES                K&D CH 8                7

     21         0.07            30   NATURE OF FIRM       K&D CH 2                30
     22         0.03            19   INFLATION            K&D CH 13     K CH 5   19
     23         0.03            15   COMPETITION          K&D CH 2      K CH 3   15
     24         0.03             2   RESOURCE ALLOC       K&D CH 11     K CH 5    2
     25         0.03            12   SHORTAGES            K&D CH 7      K CH 4   12
     26         0.03             1   SCARCITY             K&D CH 2      K CH 2    1
     27         0.0              8   DEMAND               K&D CH 3      K CH 4    8
     28         0.0             13   GRAPH INTER          K&D CH 11               13
     29         0.0             29   COLL BARG            K&D CH 10               29
     30         0.0             20   G.N.P.DEF            K&D CH 11               20
```

Figure 3 (continued)

Class Information Profile

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PRETEST COGNITIVE MAP

COGNITIVE MAP ALL STUDENTS WHO TOOK EXAMINATION (   I=I+NI P=P U=U M=M+NM) BY OVERALL INFORMATION ST

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPPPPPPPPPPPPPPPPPPPPPUMMMMMMMMMM
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPPPPPPPPPPPPPPPPPPPPPUMMMMMMMMMM
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPPPPPPPPPPPPPPPPPPPPPUMMMMMMMMMM
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPPPPPPPPPPPPPPPPPPPPPUMMMMMMMMMM
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPPPPPPPPPPPPPPPPPPPPPUMMMMMMMMMM
    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +
1                       25                       50                       75                       10
```

```
POSTTEST COGNITIVE MAP

COGNITIVE MAP ALL STUDENTS WHO TOOK EXAMINATION (   I=I+NI P=P U=U M=M+NM) BY OVERALL INFORMATION ST

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPUUUUUUU
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPUUUUUUU
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPUUUUUUU
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPUUUUUUU
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIPPPPPPPUUUUUUU
    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +    +
1                       25                       50                       75                       10
```

Figure 4

Pre-Post Information Profiles

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ECONOMIC LITERACY EXAMINATION -MCW-APM WITH RW POST TEST JUNE 1987        ELCC
EXAMINATION DATE: 06-28-87

ALPHABETIZED MCW-APM COMPARISON OF STUDENTS BY TEST SCORE

STUDENT     ACT MCW-APM ADJ MCW-APM    INF USE   RW SCORE    RW CORR GRADE   INCONSISTENCIES   USE MCW-APM RESPONSES-CONF*
   1               0.86        0.86      0.90       0.87       0.80  B       1.00      0.03      8.00     0.27   0.55
   2               0.98        0.98      1.00       0.97       0.95  A       0.0       0.0       3.00     0.10   0.93
   3               0.85        0.85      0.90       0.83       0.75  B       0.0       0.0       7.00     0.23   0.52
   4               0.72        0.72      0.88       0.63       0.45  C-      3.00      0.10      9.00     0.30   0.26
   5               0.88        0.88      1.00       0.90       0.85  B       0.0       0.0       5.00     0.17   0.62
   6               0.96        0.96      0.97       0.97       0.95  A       0.0       0.0       1.00     0.03   0.88
   7               0.98        0.98      1.00       0.97       0.95  A       0.0       0.0       2.00     0.07   0.96
   8               1.00        1.00      1.00       1.00       1.00  A       0.0       0.0       0.0      0.0    1.00
   9               0.97        0.97      0.97       0.97       0.95  A       0.0       0.0       0.0      0.0    0.90
  10               0.96        0.96      0.97       0.97       0.95  A       0.0       0.0       0.0      0.0    0.88
  11               0.93        0.93      0.93       0.93       0.90  B       0.0       0.0       0.0      0.0    0.79
  12               1.00        1.00      1.00       1.00       1.00  A       0.0       0.0       1.00     0.03   0.99
  13               0.87        0.87      0.87       0.87       0.80  B       0.0       0.0       0.0      0.0    0.56
  14               0.83        0.83      0.88       0.80       0.70  C       1.00      0.03      2.00     0.07   0.43
  15               0.97        0.97      0.97       0.97       0.95  A       0.0       0.0       0.0      0.0    0.90
  16               0.99        0.99      1.00       0.97       0.95  A       0.0       0.0       1.00     0.03   0.99
  17               0.89        0.89      0.89       0.90       0.85  B       0.0       0.0       0.0      0.0    0.68
  18               1.00        1.00      1.00       1.00       1.00  A       0.0       0.0       0.0      0.0    1.00
  19               0.93        0.93      0.93       0.87       0.80  B       1.00      0.03      0.0      0.0    0.78
  20               1.00        1.00      1.00       1.00       1.00  A       0.0       0.0       0.0      0.0    1.00
  21               0.99        0.99      1.00       0.97       0.95  A       0.0       0.0       1.00     0.03   0.97
  22               0.98        0.98      1.00       1.00       1.00  A       0.0       0.0       4.00     0.13   0.94
  23               0.90        0.90      0.90       0.90       0.85  B       0.0       0.0       0.0      0.0    0.67
  24               0.99        0.99      1.00       1.00       1.00  A       0.0       0.0       1.00     0.03   0.97
  25               0.95        0.95      1.00       0.93       0.90  B       0.0       0.0       4.00     0.13   0.83
  26               0.67        0.67      0.63       1.00       1.00  D       4.00      0.13      4.00     0.13   0.26
  27               0.99        0.99      1.00       1.00       1.00  A       0.0       0.0       2.00     0.07   0.98
  28               0.90        0.90      0.93       0.97       0.95  B       1.00      0.03      1.00     0.03   0.88
  29               0.99        0.99      1.00       1.00       1.00  A       0.0       0.0       1.00     0.03   0.96
  30               1.00        1.00      1.00       1.00       1.00  A       0.0       0.0       0.0      0.0    1.00
  31               0.84        0.84      0.88       0.87       0.80  C       1.00      0.03     10.00     0.33   0.49
```
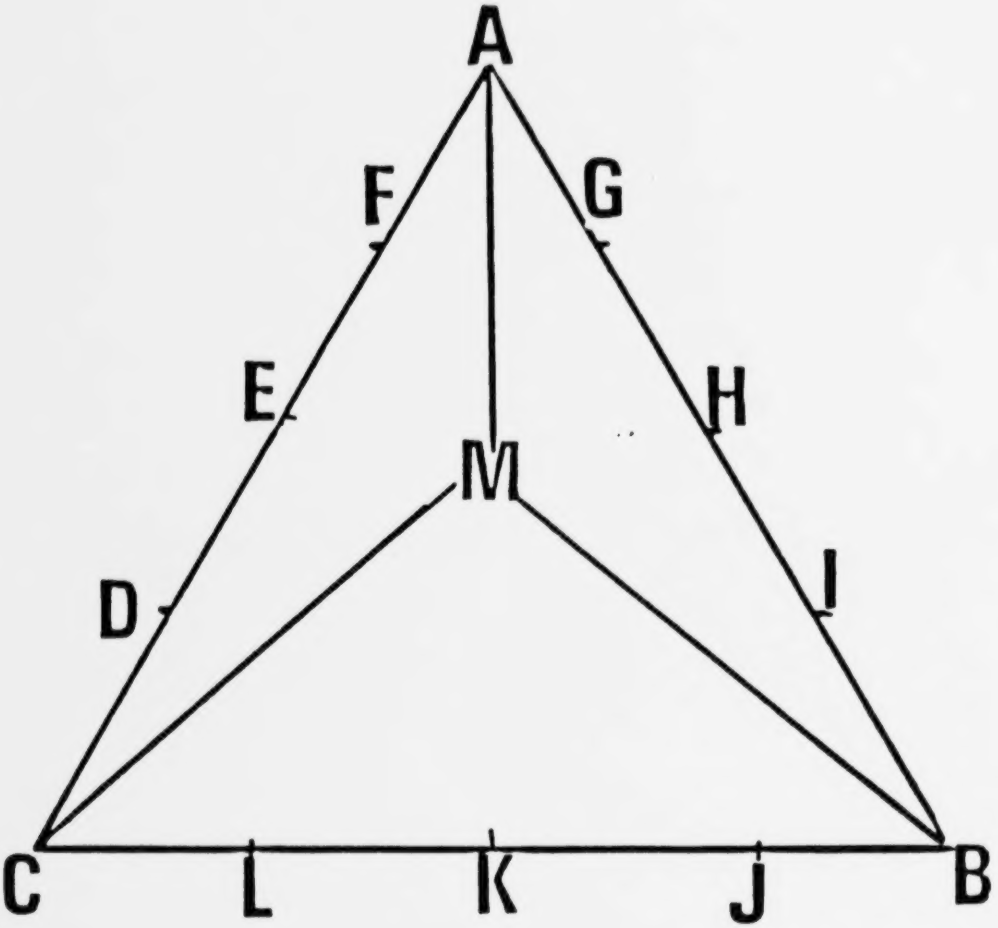

Figure 5

Summative Evaluation

- * Note the average confidence in correct information on the examination statistic. This measure was used for summative evaluation.



« I AM SURE »	
MISINFORMED (A-B-C)	—100
INFORMED	30
« I DONT KNOW »	
UNINFORMED (M)	0

MCW-APM

« I AM NOT SURE-BETWEEN 2 CHOICES »	
NEAR MISINF. (F-G-I-J-L-D)	—10
NEAR INF.	20
PART INF. (E-H-K)	10
« BOTH CHOICES INCORRECT »	—100

Figure 6

Narrative Instructions for Taking Multiple Choice Exams with Both R-W and MCW-APM Test Scoring Formats

General Response to a Test Item	Right-Wrong (R-W) Response	MCW-APM Response	MCW-APM Correct	Reward-Penalty Incorrect
I KNOW (ONE CHOICE)				
1. I am sure it is either				
A	A	A	+30	-100
B	B	B	+30	-100
C	C	C	+30	-100
I DONT'T KNOW (ALL THREE CHOICES ARE POSSIBLE)				
2. I don't know it is either				
	A or B or C	M	0	0
I AM NOT SURE (BETWEEN TWO CHOICES)				
3. I am not sure, but				
I know it's not C it is	A or B	H	+10	-100*
I know it's not B it is	A or C	E	+10	-100
I know it's not A it is	B or C	K	+10	-100
4. I am not sure, but I think it's				
A but could be C (B)	A	F or (G)	+20	-10/-100*
B but could be A (C)	B	I or (J)	+20	-10/-100
C but could be A (B)	C	D or (L)	+20	-10/-100

* If both choices are incorrect

Figure 7

Chapter Five

WHAT IS HIGH SCHOOL ECONOMICS? THE TEACHERS' PERSPECTIVE

By John C. Soper and William B. Walstad

The teacher, as the controller of the curriculum, is the key to virtually all student learning--in economics as in any other subject. Good textbooks and effective supplementary materials can assist student learning, but teachers untrained in economics or in the use of new curriculum products can inhibit the positive effects of even the best materials. Conversely, better trained teachers significantly improve student economics understanding and attitudes.[1] The economics training and experience of high school teachers is therefore worthy of careful consideration in trying to explain outputs in terms of student learning. In addition, it is important to determine what specific economic concepts teachers attempt to teach in their classes, as this constitutes "the ultimate curriculum" in the classroom. If teachers do not teach a specific economic concept, it is unlikely that students will learn that concept, even if the texts or supplementary materials used cover that concept. For these reasons, significant attention needs to be devoted to the views of the relevant teacher population as economics educators examine the structure of high school economics instruction and the effects of that experience on high school students.

Comparatively little is known about what teachers think of the high school economics course. The exception to this statement is the National Survey of Economic Education and derivative articles.[2] A review of fifteen statewide surveys was also conducted by Walstad and Watts.[3] In additon, the Walstad and Watts paper was critical of a number of aspects of the National Survey. Our study presents a new opportunity to examine an extensive survey of the opinons of high school teachers, and to link this teacher survey to the results of testing a large, nationwide sample of high school students. In this way, the outputs of economic education (student achievement and attitudes) can be viewed in the light of one of the major inputs into the teaching-learning process, the teacher.

This paper is part of a series dealing with the nature of, and results from, the high school economics course in the United States today. In our previous papers on this topic,[4] we have examined various aspects of student economics achievement and attitudes, using data collected in the 1986 national norming of the Test of Economic Literacy.[5] In this paper, we extend our analysis to the teachers of the high school economics course.

Nature of the Sample

The data for our analysis were collected in the spring of 1986 from 284 high school teachers, most of whose students were taking the norming edition of the revised TEL. Table I provides a profile of these teachers in terms of their age, teaching experience, and background training in economics, as well as some information about the schools in which they teach. The data are reported in three columns, one for each subgroup of teachers surveyed. "EC" represents 141 teachers of the economics course; "CE" represents 59 teachers of the consumer economics course; and "SS" represents 84 teachers of various social studies courses, some of which included a specific unit on economics, and some of which did not. The economics teachers comprise nearly 50 percent of the sample, while consumer economics teachers make up about 20 percent of the total, with social studies teachers representing the residual 30 percent.

In terms of the regional location of the schools in which these teachers worked, economics teachers are more likely to come from urban or suburban areas, and less likely to come from rural areas, than either consumer economics or social studies teachers. The economics teachers responding to this survey also taught more students from families with "high" incomes (by teacher estimate) than either the consumer economics or social studies teachers; economics teachers also had fewer students from families with "low" incomes.

Economics is a required subject in nearly 53 percent of the schools where the economics teachers work, compared to about 41 percent of the consumer economics teachers and 44 percent of the social studies teachers. Teacher age in years shows very slight differences across the three subgroups. Likewise, the differences in years of teaching experience are slight among the subgroups.

With respect to the average number of semester-hours of academic credit in economics, however, the economics teachers have significantly more hours (27.7 percent to 46.8 percent more) than do either the consumer economics or social studies teachers. This impression of average differences is reinforced by looking at the distribution of teachers, by course type, with six or fewer semester-hours of economics courses: Only 17 percent of economics teachers fall into this range, whereas 30.5 percent of consumer economics teachers and 36.2 percent of social studies teachers have six or fewer hours of formal economics training. At the other end of the distribution, some 47.5 percent of the economics teachers have more than fifteen hours of formal economics training, the approximate minimum for a minor in economics. This is the minimum recommended by at least one group of national experts in teacher-training.[6] In contrast, only 27.4 percent of consumer economics teachers and 20.4 percent of social studies teachers have completed fifteen or more semester-hours of economics courses. For all three groups of teachers, there is a sizable need for additional formal coursework in economics and economics education, especially for those with less than the recommended minimum of fifteen semester-hours. Teacher training in economics is still far from complete, even at the senior high school level!

The survey population was also asked the number of noncredit economics workshops/seminars they had attended in the last five years. Participation in such noncredit programs implies a teacher who is renewing or extending his or her knowledge of economics and of methods for teaching the subject. Table 1 reports the mean values for each of the three subgroups. Economics teachers attended, on average, more noncredit workshops and seminars in economics in the last five years (33 percent to 60 percent more) than their counterparts who are teaching consumer economics or social studies courses. Again, at the ends of the distribution, 23 percent of economics teachers have attended no noncredit economics workshops in the past five years, but 27.6 percent of consumer economics teachers and 40.7 percent of social studies teachers fall into the same underinformed category. At the other end, more than 12 percent of economics teachers have attended eight or more such noncredit workshops, whereas only 6.9 percent of consumer economics teachers and 3.7 percent of social studies teachers fall into this relatively well-informed bracket. It is also worth noting that none of the teacher groups averages one noncredit workshop per year. One possible explanation for this lack of knowledge renewal on the part of high school teachers is the lack of opportunity because such noncredit programs are not available in their areas. Council and center directors and other economics educators should explore the possibilities for increasing the number of such opportunities in their service areas.

Table 1
Teacher Profile

	EC	CE	SS
Location (%):			
Urban	32.6	28.8	20.7
Suburban	47.5	37.3	40.2
Rural	19.9	33.9	39.0
Students' Family Income (%):			
High	13.5	8.5	10.8
Middle	68.8	59.3	68.7
Low	17.7	32.2	20.5
Economics Required in District (% Yes):	52.9	40.7	43.9
Teacher Age: (Years)	42.3	40.3	42.0
Teaching Experience: (Years)	16.3	15.3	17.0
Economics Credits: (Semester hrs.)	13.8	10.8	9.4
Economics Workshops: (Number)	3.2	2.4	2.0

Source: 1986 TEL norming data.

Teacher Goals for the Economics Course

The teachers participating in the survey were also asked to identify which of a number of different goals of economics instruction they considered to be very important, somewhat important, or not a goal in their courses. Table 2 reports the very important goal percentages for each of the three subgroups in our survey (EC, CE, and SS), plus the percentage reported in the 1981 National Survey (NS). "To prepare students to make intelligent decisions" was a very important goal for at least 90 percent of the teachers in all groups. "To increase understanding of the free enterprise system" was a very important goal for 76 percent of the economics teachers and 85 percent of the social studies teachers, compared to 64 percent of the consumer economics teachers and 60 percent of the 1981 National Survey respondents. This is perhaps the first suggestion that our subdivided sample may provide more accurate information than the aggregated sample reported in the 1981 Yankelovich, Skelly and White study. Further support for this assertion can be found in the subgroup responses for the goal, "to teach students practical skills that they need in their daily lives, such as balancing a checkbook, using credit cards, how to shop wisely, etc." Only 29 percent of the economics teachers checked this as a very important goal, whereas 93 percent of consumer economics teachers rate this as a very important goal. And if we take the simple average of the EC, CE, and SS teachers who identify this goal as "very important", the resulting 55.7 percent is not far from the 65 percent reported in the NS column. A weighted average of the EC, CE, and SS responses yields only 47 percent, however.

A goal of the course which we added to those provided in the National Survey was "to teach students basic economic concepts." This was a very important goal for more than 90 percent of the economics teachers, whereas only about 60 percent of the consumer economics teachers regarded it so. The goal "to help students understand current economic problems" was a very important goal for 82 percent of the EC group, compared to 62.5 percent of the CE group, 68 percent of the SS group, and 66 percent of the NS group. From these comparisons, we believe that the aggregated sample used in the 1981 National Survey masks a great deal of significant detail and confuses the notion of what an "economics" teacher really is. By failing to differentiate among teachers of different types of courses, the National Survey averages may hide as much as they reveal.

The lower part of Table 2 reports the responses of the four subgroups to the question, "which statement best describes the way that you teach economics?" (here labeled EMPHASIS). Significant variances across the subgroups are self-evident and reinforce our contention about sample aggregation, above.

Table 2
Course Goals and Teaching Emphasis (%)

	EC	CE	SS	NS
GOALS:				
Intelligent Decisions	92.9	98.2	92.9	90
Understanding of Free Enterprise	76.4	64.3	85.7	62
Teach Practical Skills	28.8	92.9	45.5	65
Teach Basic Economic Concepts	90.7	59.6	82.1	
Understanding of Current Problems	82.1	62.5	67.9	66
Teach Alternative Economic Systems	32.4	23.2	40.0	30
Other Goal(s)	4.3	1.7	4.8	
EMPHASIS:				
Teach Theoretical Economics	33.3	5.3	37.0	16
Teach Practical Economics	9.9	47.4	13.0	32
Both Theoretical and Practical	56.0	45.6	38.9	49
Neither Theoretical nor Practical	0.7	1.8	9.3	1
Number Responding	141	57	56	

Source: 1986 TEL norming data and 1981 National Survey data.

Topical and Concept Teaching

The survey participants were also asked to identify from extensive lists which economic topics and economic concepts they were currently teaching. Table 3 displays the percentage results for the three subgroups in our survey, as well as the results reported in the 1981 National Survey. Again, the subdivision of our sample reveals sharp differences in the topics and concepts taught in the three different courses. For instance, 75 percent of the CE group and 67 percent of the NS group teach "consumer issues/consumerism," whereas only 47 percent of EC teachers and 25 percent of SS teachers cover this topic. The fundamental economic concept of "opportunity cost" is taught by over 90 percent of the EC group, but by only 64 percent of the CE group, 29 percent of the SS group, and 40 percent of the NS group. Similar differences are apparent for such basic economic concepts as "scarcity" and "trade-offs." Another interesting finding is that higher percentages of all groups of teachers report teaching "supply and demand" than "scarcity." One might well wonder how "supply and demand" is taught without some prior notion of the concept of "scarcity?"

Table 3

Topics Currently Teaching (%)

	EC	CE	SS	NS
Business	87.2	62.7	48.8	74
Comparative systems	80.9	52.5	51.2	70
Consumer issues/consumerism	46.8	74.6	25.0	67
Current economic issues	79.4	50.8	40.5	75
Decision-making skills	69.5	79.7	29.8	63
Economic history	42.6	8.5	34.5	40
Economic theory	68.1	13.6	28.6	39
Free enterprise system	86.5	52.5	52.4	77
Government regulation	82.3	57.6	53.6	78
Government statistics	78.7	55.9	35.7	66
"How-to"	32.6	81.4	11.9	59
International economics	66.7	28.8	38.1	44
Labor-management relations	57.4	30.5	38.1	57
Market structure	81.6	47.5	40.5	48
Monetary system	89.4	61.0	50.0	81
Natural resources	65.2	44.1	38.1	60
Oppurtunity Cost	90.8	64.4	28.6	40
Production of goods	81.6	40.7	44.0	66
Scarcity	90.1	66.1	41.7	64
Supply and demand	95.0	81.4	48.8	82
Tax system	75.9	72.9	32.1	69
Trade-offs	77.3	57.6	31.0	27
OTHER	5.7	3.4	1.2	1
LEFT ALL BLANK	1.4	3.4	34.9	
Number responding	141	59	84	

Source: 1986 TEL norming data and 1981 National Survey data.

Perceived Barriers in Teaching Economics

Our survey included a question as to which barriers the teachers felt they faced in teaching economics. Unfortunately, no similar question was included on the National Survey. Table 4 lists the teacher responses by subgroup, ranked in order of frequencies reported by the economics teachers. "Lack of student interest" is highest-ranked for both EC and CE teachers, and second highest for the SS teachers. "Limited preparation time" and "lack of supplementary materials" also rank high as barriers. In fact, these three perceived barriers may be lowered simultaneously, if well-conceived and executed supplementary materials are made available to teachers. Good supplementary economics materials attack the problem of low student interest directly, and reduce the amount of teacher preparation time. Business, governmental, and other organizations interested in improved economic literacy for high school students need to focus on this point, as a cost-effective method of raising economic literacy is at hand in the development and dissemination of top-quality supplementary materials.

Interestingly, few teachers identify the textbook as a significant barrier in teaching economics. This should be no surprise to experienced economics educators, as the private market provides a broad range of alternative textbooks, many of which are excellent. Clearly, most teachers feel that commercial publishers are doing at least an adequate job of developing and marketing good economics textbooks. Even fewer teachers argue that the subject is "too difficult for students." This finding should also be comforting to economics educators, as the "maintained hypothesis" has been that economics is, and should be, accessible to virtually all students.

Table 4

Barriers Faced in Teaching Economics (%)

BARRIER	EC	CE	SS
Lack of student interest	41.8	40.7	27.4
Limited preparation time	39.0	28.8	25.0
Lack of supplementary materials	36.2	40.7	23.8
Limited class time	29.1	15.3	32.1
Need practical applications	22.7	27.1	17.9
Limited teacher background	20.6	23.7	15.5
Poor textbook	17.0	22.0	9.5
Too difficult for students	13.5	15.3	13.1
Other	7.1	5.1	7.1
None of the above	10.6	8.5	1.2
Number responding	141	59	84

Source: 1986 TEL norming data.

Training and Materials Needs

Teachers were also asked what types of training or materials they would like to receive. Table 5 lists their responses by subgroup (including comparable responses from the 1981 National Survey, ranked in order of importance to economics teachers. "More materials for teaching economics" is ranked highest by all three of our survey subgroups, but no comparable item was listed in the National Survey. This finding reinforces the point about supplementary materials being a cost-effective approach to increased economic literacy. Here it is clear that teacher demand is strong. Noncredit workshops and credit courses in economics content also rank highly with all teachers, as do noncredit workshops and credit courses in how to teach economics. Teachers of economics courses--those with the most formal training in the discipline--express a greater need for more formal economics training than do teachers of consumer economics or social studies courses. Somewhat curiously, teachers in the 1981 National Survey expressed significantly lower needs for credit courses in both economics content and economics teaching methods. A relatively high proportion of social studies teachers also want "more clearly defined guidelines on how to teach economics," a need which probably reflects the lower level of formal economics training of social studies teachers, together with their less specialized teaching assignments.

Table 5

Types of Training or Materials Teachers Want

ITEM	EC	CE	SS	NS
More materials for teaching economics	68.8	76.3	73.5	--
Noncredit workshops in economics	47.1	37.3	37.3	59
Credit courses in economics	44.7	25.4	28.9	29
Noncredit workshops in how to teach economics	42.1	37.3	45.8	47
Credit courses in how to teach economics	35.7	27.1	31.3	24
Guidelines on how to teach economics	31.4	32.2	45.8	35
Other	7.9	5.1	4.8	--
None of the above	4.3	5.1	4.8	--
Number responding	141	59	84	--

Source: 1986 TEL norming data and 1981 National Survey data.

"Market Penetration" by Economics Education Organizations

One question of particular interest to the suppliers of economics education materials and teaching aids to high school teachers is the degree of "market penetration" enjoyed by various provider organizations and agencies. Table 6 reports the percentage responses by subgroup for sources of "a lot" or "some" free or low-cost economics teaching materials and aids. Again, the responses are ranked in order of frequency by *economics teachers. The Joint Council on Economic Education and its* network affiliates rank at the top for all three teacher groups. Interestingly, federal government agencies rank next highest, and significantly above the business community. Business firms and business- related organizations need to take note of this fact: public sector agencies appear to have a higher degree of market penetration with teachers of the high school economics course. Government agencies are "getting their word out" to a greater extent than the business community.

"State agencies" (presumably state departments of education) are cited as sources of "a lot" of "some" economics teaching materials by comparatively large percentages of consumer economics and social studies teachers, but much lower percentages of economics teachers. This suggests that economics teachers are less dependent on the state education agencies for economics teaching guidelines and materials than their peers who teach consumer economics and social studies. Looked at another way, these data imply that economics teachers are more likely to draw their materials from more specialized sources (such as the JCEE and its affiliates), probably having more sophisticated economic content.

Table 6
Sources of "a lot" or "some" Teaching Materials (%)

SUPPLIED BY:	EC	CE	SS
Joint Council on Economic Education	71.7	43.7	60.0
*State council/center for economic education	60.8	50.0	68.8
Federal government agencies	40.7	41.7	34.9
Business community	30.9	37.6	33.3
Other organizations	28.6	40.0	25.0
Junior Achievement	25.5	10.0	20.5
Community organizations	14.5	15.5	12.2
State agencies	14.0	35.5	34.1
Other	28.6	40.0	25.0
Number responding	141	59	84

Source: 1986 TEL norming data.

Conclusion and Recommendations

Analysis of this relatively large sample of survey responses casts new light on the structure of the high school economics course and its substitutes in the typical curriculum. Our earlier findings strongly indicated that students taking a separate economics course learned significantly more economics than did students taking either a consumer economics or social studies course.[7] In fact, these studies indicated that little learning of economics results from substitutes for the separate economics course at the high school level. Examination of the data in this teacher survey provides more explanation of why this would be the case.

Teachers of economics courses have more training in economics, use a different set of goals and teaching emphases, teach more economic concepts and topics, and draw upon different sources for their teaching materials, when compared to their colleagues who are teaching consumer economics or social studies courses. Economics teachers are also more likely to perceive the need for more formal training in economics and economic education methods than their counterparts teaching "substitute" courses, despite the fact that the economics teachers already have more depth in the subject.

One recommendation which flows from this conclusion is that more high school students ought to take a separate economics course, taught by a teacher with substantial training in economics (defined as at least fifteen semester-hours of coursework). As we have argued elsewhere, the "infusion approach" to economics education in the high schools is a poor substitute for a separate economics course. Another strong

recommendation is that more opportunities need to be made available to high school economics teachers for additional training in economics content and methods for teaching the subject. These can and should be provided in both credit and noncredit formats by councils and centers for economic education throughout the country. And the continuing education of high school economics teachers needs to be stressed.

In addition, more and better supplementary teaching materials need to be developed and disseminated to high school economics teachers. This is the highest-priority need of teachers, as they see it, and is highly cost-effective. Economics teachers are also most likely to look to the Joint Council and its network affiliates as the primary source of such materials. The business community needs to increase its efforts in this area and to use the resources of the existing economic education network to disseminate new materials.

There is clear evidence that the difficulty of economics for students is not a significant barrier to more and better economics education. Moreover, poor textbooks are not the problem. Better trained teachers, using sound supplementary materials, in separate economics courses, appear to be the most direct approach to the problem of greater economic literacy. Other substitutes are unlikely to ameliorate the problem.

FOOTNOTES

1. J. F. Chizmar, Jr. and B.J. McCarney, "An Evaluation of a 'Trade-Offs' Implementation Using Canonical Estimation of Joint Educational Production Functions," Journal of Economic Education 15 (Winter 1984): 11-20; and Walstad and Soper, "A Report Card on the Economic Literacy of US High School Students, " American Economic Review Proceedings 78 (May 1988): 251-256; and Walstad and Soper, "What is High School Economics? Factors Contributing to Student Achievement and Attitudes," Journal of Economic Education, forthcoming, 1989.
2. Yankelovich, Skelly and White, Inc., National Survey of Economic Education 1981: Grades Six Through Twelve (New York: Phillips Petroleum Company, 1981); See also J.R. Clark and D.D. Barron, "Major Findings of the National Survey of Economic Education," Journal of Economic Education 12 (Summer 1981): 45-51; and Clark and Barron, "Fifteen Years of Economic Education in America: How Far Have We Come? Where Are We Going?" Journal of Business Education (October 1983): 18-22; and Clark and E.C. Bogan, "Economics in the American Classroom: What Are We Teaching? What Should Be Taught?" The Social Studies (Nov./Dec.1982): 256-62.
3. William Walstad and M. Watts, "Teaching Economics in the Schools: A Review of Survey Findings," Journal of Economic Education 16 (Spring 1985): 135-146.
4. Walstad and John Soper, "What Is High School Economics? TEL Revision and Pretest Findings," Journal of Economic Education 19 (Winter 1988): 24-36; Walstad and Soper, "A Report Card on the Economic Literacy of U.S. High School Students;" Walstad and Soper, "What Is High School Economics? Factors Contributing to Student Achievement and Attitudes," Journal of Economic Education, (forthcoming, 1989); Soper and Walstad, "What is High School Economics? TEL Revision and Pretest Findings," Journal of Economic Education 19 (Winter 1988): 24-36; and Soper and Walstad, "The Economic Attitudes of US High School Students: New Norms for the Survey on Economic Attitudes," Theory and Research in Social Education, (forthcoming).
5. John Soper and William Walstad, Test of Economic Literacy: Second Edition. Examiner's Manual (New York: Joint Council on Economic Education, 1987, hereafter, TEL).
6. J.A. Mackey, A.D. Glenn, and D.R. Lewis, "Improving Teacher Training for Precollege Economic Education," Journal of Economic Education 8 (Spring 1977): 118-123.
7. Soper and Walstad, "What Is High School Economics? Posttest Knowledge, Attitudes, and Course Content," Journal of Economic Education 19 (Winter 1988); and Walstad and Soper, "A Report Card"; and Walstad and Soper, "What Is High School Economics: Factors Contributing to Student Achievement and Attitudes."

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Chapter Six

WHAT CAN BE TAUGHT IN HIGH SCHOOL ECONOMICS COURSES?

By Paul Heyne

What can be taught effectively at the high school level depends on what the school system is willing to support, what teachers are able to communicate, and what students are prepared to learn. Those are all constraints that pinch. Before deciding what we want to advocate by way of economics education at the high school level, we ought to pay close attention to what is possible. But what is possible is going to depend in large part, especially if we are imaginative and resourceful, upon what we think is desirable. In other words, we ought to formulate our concrete objectives in a dialogue between possibility and desirability, recognizing that constraints can be altered or manipulated when the net advantage is large enough, and that the desirability of particular goals is always dependent upon the cost of reaching them.

If all that is vague, it is also noncontroversial. I hope to become less vague and more controversial as I proceed.

The system--state legislatures, school boards, school administrators--has in recent years signaled greater support for economics education in the high schools. However, what the system is willing to support is often not what many of us would recognize as worthwhile economics education. I have grave reservations about the movement to promote "free-enterprise education" because it tends to produce a preachy, insubstantial, and ineffective output. I'm sure that able teachers are doing many worthwhile things under legislative mandates to teach students "the principles of our free enterprise system." But I am interested in education, not indoctrination. And while I would be high in the 90th percentile when it comes to wishing that our citizens had a deeper appreciation of free enterprise system, I do not believe that appreciation is inculcated by bad sermons. Understanding how markets work does not guarantee that anyone will become a staunch supporter of well-defined, stable property rights and few political restrictions on exchange--the crucial characteristics of a free-enterprise system. But teaching people how markets work is the most effective way to nurture support of that kind.

Some of the system's support for economics education is support for teaching what is called "consumer economics" or, less charitably, "how to balance your checkbook." I don't think such stuff belongs in the schools, because it's usually boring and ineffective, it displaces more lively learning, and it may turn better students away from genuine economics.

It is possible, however, to exploit the system and to present a respectable unit on the real stuff in the guise of consumer economics. I helped prepare material several years ago designed to accomplish that subversive but noble purpose. Since it won an award from the Joint Council on Economic Education, I can recommend it to you in good conscience for its helpful hints on how to teach economic principles while pretending to teach "consumer economics." The title is Choices in the Marketplace: A Basic Unit on Consumer Economics, and it's available at a nominal cost from the Washington Council for Economic Education.[1] No one receives any royalties.

Constraints created by the system merge into constraints imposed by the competencies of teachers. Even under the most favorable circumstances we can realistically imagine, no high school will have room for a full-time economics teacher. As a result, economics courses will usually be taught by people who have had very few courses in economics and who cannot effectively communicate to their students a basic understanding of economic principles. I don't mean to imply that further college courses in economics would cause inept teachers to become effective instructors in the subject. It is at least as likely that further courses voluntarily undertaken would indicate an interest in the subject and hence the capability of teaching it effectively.

A knowledge of economic theory is a necessary but far from a sufficient condition for being able to communicate the important insights of economics. A light must click on. Economics must come to be seen as a set of concepts that enables one to make sense of puzzling social phenomena. When this occurs, the student of economics becomes an incipient teacher of the subject. When it does not occur, the most knowledgeable economist is merely a bore as a teacher. And few subjects can be as boring as an economics course that merely rehearses definitions of arbitrary concepts.

We must hope that economics instruction in the high schools will devolve upon teachers who have studied or read enough economics to acquire a basic comprehension of it and who have seen that light click on. We shall hope in vain, however, if we expect this to make them effective teachers of macroeconomics. A substantial body of data now exists to support the claim that the average student who studies economics in high school comes away with a B's worth of knowledge about microeconomics but only a D's worth about macro.[2]

Why is this? The best explanation is that macroeconomics is in an unsatisfactory condition. The fault lies not in the teachers but in the subject matter.[3] It is extremely difficult to introduce students to macroeconomics in a satisfactory manner today because our macro models are all currently failing either the test of simplicity or the test of applicability and sometimes failing both.

If aggregate supply-aggregate demand models are kept simple enough to provide insight, they fail to account for most of the phenomena we are trying to explain. When the models are expanded so that they can explain the important macro phenomena we actually observe, they become too complex to provide insight before they have become complex enough to incorporate the essential relationships. It is consequently not surprising that high school students exposed to macroeconomics show, when tested, almost no understanding of aggregate relationships or of fiscal and monetary policy. In this respect they are roughly in the same position as government officials who are trying to moderate the business cycle or to keep down the inflation rate while keeping up the rate of growth in real GNP. We can't teach macroeconomics to high school students if macroeconomics is in disarray.

I'm not going to comment much more about this because I am conscious of being in the minority in making this claim. I shall simply record my opinion that macroeconomics has failed because it attempted more than it could achieve: a satisfactory theory of "the economy as a whole." This failure was concealed for a long time by the apparent stability of certain relationships among aggregative variables that seemed to be readily manipulable by policymakers. When these appearances proved illusory, macroeconomics should have fallen back to its proper role as a very important, perhaps the most important, branch of applied economics. Instead we have kept up the pretense of having two kinds of basic economics, micro and macro. Consider this fact: About one-fourth of all colleges and universities offering a two-term sequence in introductory economics require or recommend that macro be taken first; another one-fourth of the schools require or recommend micro first; and the remaining half make no recommendation.[4] Isn't this compelling evidence of disarray in the profession?

The constraints imposed by the abilities of teachers shade off into constraints imposed by the disinterest of students. People never learn anything in which they are not interested. It is possible to arouse interest with external threats; but since high school teachers today almost surely can't muster credible threats adequate to arouse an interest in economics, they will have to rely upon students' interest in the subject matter itself. Why should high school students be interested in economics?

A knowledge of economics will not measurably enhance their ability to make money and we should not pretend otherwise. The principles of economics are far more useful to us in our public roles, as participants in the processes of democratic governance, than they are to us as private decision makers in the household, in business, or in investment markets. The problem here is that since no one of us can realistically hope to improve public policy through our own effort, the public usefulness of economics creates no private incentive to learn it. Teachers of economics must therefore fall back upon the capacity of the subject matter to satisfy curiosity, to answer questions that students are asking. All of this implies that efforts to teach worthwhile economics to high school students will fail unless teachers can show students that economics answers interesting questions.

I think it does. Moreover, the learning of economics can and should be a process of empowerment. The universe of social interactions that economics clarifies is widely perceived as threatening and intimidating. Students who begin to understand the logic of previously mystifying occurrences and to see why certain events unfold as they do acquire a sense of personal power. Ignorance breeds anxiety and feelings of impotence that a knowledge of economics can help to overcome. Students who begin to learn some good economics will often become avid for more.

Given our ambitions and all these constraints, what do we want to see taught in high school economics courses? I shall conclude by presenting my case for a simple but potentially rich curriculum, one dedicated to exploring the twin propositions that demand curves slope downward to the right and supply curves slope upward to the right. The graphic representation is not critical and at an early stage is not even desirable. I use this language only because I am now addressing, I assume, adepts and true believers.

Economics explains the process of supply and demand. Adam Smith's great achievement in The Wealth of Nations was to discern and describe this process more clearly than had ever been done before. Supply and demand is a process, not a pattern or a formula. It is a process of mutual accommodation upon which we are all dependent. When property rights are sufficiently clear and generally agreed upon and there are few restrictions on exchange, this process will attach money prices to goods. Anything that increases the scarcity of a good will then cause its money price to be bid up. Demanders will consequently try to make do with less and suppliers will try to provide more. That is the economics we should be teaching at the high school level. Most of what economics has to contribute to public understanding and policymaking is simply some elaboration or application of supply-and-demand analysis. The closer we stick to this core, the more effective will be our teaching of introductory economics.

The best way to teach supply and demand at the introductory level is probably through a sympathetic but critical examination of proposals and policies that seem to deny or ignore the downward slope of demand curves and the upward slope of supply curves. Agricultural programs are a traditional and rich source of material. Why do farmers produce more of a commodity and users purchase less when the government raises its support price? When acreage restrictions are imposed, which land will be retired, what will happen to fertilizer use, and why will the production of alternative crops increase? What happens to the price of land when crops grown on it are eligible for subsidies, and how does this process produce higher costs from higher prices? The fun and profit in supply-and-demand analysis comes from learning to see how the downward slope of demand curves and the upward slope of supply curves continually produce unplanned consequences, some more than welcome and others altogether unwelcome.

The basic reason that demand and supply curves have their characteristic slopes is people's tendency to economize, to make the most of what they have. Demanders and suppliers calculate the costs of their decisions as the value of forgone opportunities. An increase in the price of a good makes alternatives more attractive for potential demanders and less attractive for potential suppliers. A substantial amount of supply-and-demand analysis should take the form of showing how ingenious people can become in searching out and employing substitute goods or activities when there is a change in the relative prices they perceive. Elasticities of demand and supply are measures of their ingenuity.

Examples should be sought out and used from the students' own experience and from current events. Attention can be paid to goods that are not (usually) allocated on the basis of money prices, such as school grades, favors among friends, and adoptable children; and both the reasons for these "exceptions" and their consequences can be explored. Notions of fairness also lend themselves to supply-and-demand analysis, and much of value can be learned from examining common conceptions of "just price" or "just wage" and the implications of putting these conceptions into practice.[5]

Much of value can often be learned by asking about the shape of the demand or supply curves that appear to underlie particular policy proposals. For example, advocates of a large increase in the legal minimum wage seem to believe that the demand curve for unskilled labor is perfectly inelastic below some upper limit (employers "need" a certain number of unskilled workers), and that the supply curve is perfectly inelastic above some low reservation wage. The accuracy of these assumptions can be discussed once they have been made explicit. Students can begin to see how the availability of substitutes for unskilled labor introduces elasticity into the demand for it and how alter-natives to low-wage employment introduce elasticity into the supply of unskilled work effort. At no stage is it necessary to draw any policy conclusions; it will be enough to track out the principal implications of varying policy proposals.

Housing policies, welfare programs, traffic congestion, rock concerts--the list of topics and issues that lend themselves to supply-and-demand analysis is endless. We can even do some solid "macroeconomics" if we're willing to treat it as a set of questions amenable to supply-and-demand analysis. Can price and wage controls halt inflation? Why has the employment rate in the United States (employed persons divided by the population sixteen and over) run about 3 percentage points higher in the 1980s than it ran in the 1960s, while the unemployment rate (unemployed persons divided by the labor force) was also running about 3 percentage points higher? Why do interest rates rise when people begin to anticipate a faster rate of inflation? Why do people hold inventories, and what kind of signals induce them to raise or lower the level of these inventories?

As the last question indicates, I do not want supply and demand analysis confined to the examination of "sure things." Uncertainty is an important fact of life and information is one of the scarce goods on which people try to economize. Nor should we stick to the many-person cases that enable us to abstract from collusion, market restrictions, or strategic behavior. Almost any kind of interesting social transaction can be clarified to some extent with the tools of supply-and-demand analysis, and we should apply these tools wherever they work. We can use them to explain the workings of the democratic political process, the behavior of nonprofit institutions, the prevalence of litter, the spread of fast-food franchises, and the dissolution of AT&T.

I believe that teaching how supply and demand processes permeate our society, as well as other societies with "alternative" social systems, can be an enjoyable experience for high school teachers and their students. I am less sure that everyone required to teach economics courses can acquire the knack. Even if disinterest, incompetence, political considerations, or organizational failures prevent the implementation of a supply-and-demand curriculum for high schools, I think the idea can be used to improve the teaching of economics almost anywhere.

FOOTNOTES

1. 1014 Securities Bldg., Seattle, WA, 98101. Tel. (206) 622-0965
2. See William B. Walstad and John C. Soper, "What is High School Economics? TEL Revision and Pretest Findings," Journal of Economic Education 19 (Winter 1988) .
3. Walstad and Soper do not agree. See their contribution to the 1987 meetings of the American Economic Association, "A Report Card on the Economic Literacy of U.S. High School Students," American Economic Review, Proceedings 78 (May 1988), p. 255.
4. I have fudged these data slightly from Stephen Buckles and John S. Morton, "The Effects of Advanced Placement on College Introductory Economics Courses," American Economic Review 78 (May 1988), p. 267.
5. For some useful material, see Daniel Kahneman, Jack L. Knetsch, and Richard Thaler, "Fairness as a Constraint on Profit Seeking: Entitlements in the Market," American Economic Review 76 (September 1986).

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Chapter Seven

IS THE CURRICULUM RELEVANT TO THE HIGH SCHOOL STUDENT?

By Gordon L. Austin

"Economic Literacy" is a phrase that means different things to different people, and what constitutes "literacy" in this discipline can vary greatly depending upon the objective to be achieved. The Econ-Ed Foundation was incorporated in 1976 for the purpose of achieving a rather narrow, but ambitious objective--that of providing high school students in California with sufficient information of basic economics principles for them to function effectively as producers and consumers in a market system.

The business and professional people who established the Econ-Ed Foundation were, and continue to be, motivated in this endeavor by the deficiency of so many young people entering the workforce in the adequate performance of their roles as producers. As employers in the private sector, we believe that if young people were taught, and required to demonstrate a grasp of, some basic principles of economics, with particular emphasis on the workings of the market system, we would begin to create a workforce of individuals who understand such fundamentals as the correlation between production and compensation, supply and demand, competition and profit, cost and benefit. As we enter increasingly and rapidly into an interdependent global economy, the understanding of these factors becomes more critical than ever.

Relevant Curriculum

With the objective then of having all high school students, whether college bound or not, have some understanding of basic economics as a prerequisite for graduation, the question becomes, how to incorporate such a requirement into the high school curriculum, and what should become the focus of that curriculum.

In California--as I believe is the case in several other states--the legislature has now established requirements for a high school course in economics--something that has not existed heretofore. As with many legislative mandates, this requirement is viewed as a godsend by some, anathema to others, and a mixed blessing to many of us who, although fervent supporters of the goal of economic education, fear that the mandate may be counterproductive. If, in the haste to implement the state requirement, the course content evolves into a theoretical regurgitation of economic dogma, rather than an innovative, dynamic, discussion-oriented forum that focuses on contemporary issues and illustrations, it will arouse little interest of the students. In essence, we are concerned that too many schools will "dust off" an old "econ" elective unit that justly earned the appellation, "the dismal science," and resurrect this to meet the new state of California requirement.

In order to avoid this potentially counterproductive eventuality, the Econ-Ed Foundation believes it is essential to emphasize teacher training in methodology and the creative use of timely materials in the classroom to demonstrate the practical application of economic issues for the high school student.

Having said this, I hasten to add that I do not mean to imply that we abandon all textbooks in the teaching of economics. Obviously, a knowledge of some fundamental principles must be acquired by the students, and there are many quality texts available from which these principles may be taught.

It is however, my firm belief that the teaching of economics at the high school level, as a required, rather than as an elective, course, will be of little value unless a concerted effort is made to demonstrate the relevance of the subject to the everyday life experiences of the student and his/her family. In order to do this, a nontraditional approach to teaching the subject must be implemented.

Just overcoming the course title, "Economics" is a hurdle in itself when it comes to student attitudes. A couple of years ago I recall beginning a presentation in an llth grade class with the question, "What do you think of when you hear the word, "Economics?" and a young lady in the back of the classroom immediately responded, "Time to tune-out." I seized upon her response and asked her to explain why she felt that way, and she said essentially, "because it's just a bunch of graphs and formulas that we'll never use, and don't need." I asked the others in the room to honestly tell me if they agreed substantially with the young lady, and almost the entire class raised their hands.

I said, "Okay, then let me ask one other question. How many of you are interested in "money?" Of course, all hands went up, and I said, "All right, let's forget about "economics" and we'll talk about money," and from that point on, I had their attention for the remainder of the seminar.

I use this example to illustrate the importance of tuning in on the wavelength of the groups that we are trying to reach. If you can't communicate with them, it doesn't matter much what is taught.

The message that I want to convey is the urgency of examining a different approach toward economics education. It is to develop a delivery system that equates economics with real life--as it's perceived by the students. Only when they grasp the relationship between this subject and their personal life experiences, both where they are now and where they're going, will "economics" have any meaning to them.

The danger, as I see it today, is that we often attempt to overcompensate for decades of neglect of this discipline in the public school systems by trying to cram college level economic theory into the high school setting, and when we do so, we simply reinforce the image of economics as "the dismal science" to be avoided at all costs.

Many people would agree that there is a great need for better education of our young people than many have been receiving. Increasing numbers of people also would agree that a knowledge of economics is an important part of education. Where differences persist is in the implementation arena.

The Econ-Ed Foundation focuses primarily on one facet of the economics education spectrum--the high school student. It is not because we feel that other audiences are not as important, but simply a recognition of our own very limited resources and the magnitude of the overall picture.

In this targeted approach toward one age group of students, the premise from which we operate is the need to develop among the broad spectrum of high school students an awareness of the essential relationship between basic economic principles and their individual lives. To achieve this, we believe in simplicity rather than complexity and in practical application rather than academic theory.

I think Marilyn Kourilsky, in the introduction to her book, Understanding Economics, stated the case as well as I have ever read or heard it expressed. She writes, "The greatest contribution the discipline of economics has to offer is not its elaborate nomenclature or its geometric curves; it is the process of economic reasoning."

If you subscribe to the theory that there is an inexorable correlation between individual and economic freedom, it is axiomatic that you would also recognize the importance of an economically literate populace to the preservation of liberty.

A little more than two hundred years ago a British professor by the name of Alexander Tytler wrote about the fall of the Athenian Republic. He wrote, "A democracy cannot exist as a permanent form of government. It can only exist until the voters discover that they can vote themselves largess from the public treasure. From that moment on, the majority always votes for the candidate promising the most benefits from the public treasure, with the result that a democracy always collapses over loose fiscal policy, always followed by a dictatorship."

If Professor Tytler was correct, perhaps then the most we can hope for is to extend the duration of this cycle of democracy by helping the masses of young people understand that money doesn't grow on trees, and that when we vote ourselves "largess from the public treasure," we contribute to the decline of productivity, which is the only source of providing a "public treasure."

Our hope is to stimulate students to explore the process of "economic reasoning," as Dr. Kourilsky puts it. Consequently, from our viewpoint, the high school teacher should concentrate--not so much on pursuing a depth of knowledge of economic theory--as on the ability to convey the basic principles of economics to the students in ways that will arouse their interest. Only then will the curriculum be relevant to the high school student.

Gordon Austin is president of the Econ-Ed Foundation in San Diego.

Chapter Eight

ECONOMICS AND THE YOUNG ADOLESCENT LEARNER

By Ronald A. Banaszak

Thomas Jefferson declared in 1820, "I know of no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it [power] from them, but to inform their discretion."[1] Democracy demands well-informed citizens. Today, citizens cannot be considered well-informed and cannot function effectively without being economically literate. Of the literacies citizens need, economic literacy is especially important for it is both a body of knowledge and a way of thinking about complex choices citizens have to make on both societal and personal levels.

Economic literacy is not casually acquired by merely surviving in our economy. It requires formal instruction that should be part of the education of all citizens. Young adolescents are not now receiving adequate formal instruction about our economy. As evidence notice the following uninformed answers to simple economic questions given by randomly selected eighth grade students interviewed recently by the author.[2]

> "Who benefits from the economic system? Just the rich and wealthy, I think."
> "The Federal Reserve is the extra soldiers the government has in case of an emergency."
> "Gross national product? Sounds like something somebody chewed up and spit out!"
> "Government is more important to the economy because it's government that starts businesses, keeps them up and running."

Young Americans, taught so little about how our economic system works, are unprepared to function as capable economic decision-makers. This is unfortunate and potentially dangerous, because today Americans are being asked to make critical decisions on a vast array of sophisticated economic issues relating to personal finance, business and public policy. Our future promises only greater complexity. Economic illiteracy weakens our children's potential to lead happy, successful lives and undermines the very foundation of our democratic society.

Economics for Young Adolescents

Economics is a subject well-suited for study by the young adolescent. It allows students to examine their personal development and explore the larger society they are entering. Young adolescents are experiencing dramatic changes that are physical, emotional, social and psychological. These youngsters are just emerging from the safety of their homes into the larger society, developing biologically and intellectually, becoming more adult but not yet mature. Inquiring, willing to explore, yet needing the security of a peer group, they are becoming participants in the outside world, developing attitudes and values that will remain with them for the rest of their lives. At the same time, they are beginning to be held responsible for actions they take. Young adolescents face an enormous range of alternatives, requiring that they make choices and deal with resulting consequences. Needing to deal with the new found variety of alternatives, choices and consequences requires new skills and is highly risky for young adolescents. The study of economics can help these students cope with their new decisions and responsibilities.

Economics is the study of decision-making. Usually the decisions deal with the allocation of resources. Economics can assist students in understanding such questions as: What employable skills do I have? Why should I work? What determines wages and prices? How does one gain food, clothing and shelter? Why do people work together for their material well-being? Economic reasoning is not and should not be restricted to material matters, however. Economic reasoning can help young adolescents as they make decisions regarding human relationships, such as selecting friends, dating behavior and whether or not to use drugs.

Economic analysis can help young adolescents understand the world. Similar choices are faced by all peoples, regardless of culture, geographic location, age or political belief. Economic analysis can provide young adolescents with powerful insights to understand decisions made by others.

There are additional reasons why the study of economics is especially appropriate for young adolescents. The following four reasons seem most important:

1. These students are developing new cognitive abilities permitting more sophisticated and adult ways of reasoning. The are moving from concrete to abstract reasoning. This change helps them reason about physical and social events that are unobserved and unobservable. Such changes in thinking mean that students are able to consider economics not as isolated concepts, but as an integrated system.
2. During their early teens, young people are increasingly involved and aware of their involvement in our economic system . They begin to recognize that they are part of a world larger and more complex than their immediate family and community. They are an increasingly significant factor in the labor force and their spending power is significant, too. Further, they are beginning to think seriously about their future occupations.
3. Young adolescents are forming their attitudes. The study of economics provides an opportunity to present students with factual information that students can use to build their own attitudes, whatever those attitudes are.
4. Since most young adolescents are still enrolled in grades seven to ten regardless of their intelligence, socioeconomic background, or career goals, economic education aimed at these grades has the potential of reaching almost every student, unlike the more traditional twelfth grade elective economics course.

Goals for Young Adolescent Economic Education

Generally a middle/junior high school economic education program should help the young adolescent learner gain the knowledge, values and reasoning abilities necessary for them to become successful participants in our economic system. J.E. Davis identifies six subgoals:[3]

1. Develop a commitment to the basic values of the American economic system.
2. Recognize the basic features of the U.S. economy that distinguish it from other economic systems.
3. Become aware of the strengths and problem areas in our mixed market economy.
4. Actively construct new meanings about the nature of their own economic behavior (what they choose to do) and the economic behavior of the people in the world.
5. Apply an economic reasoning framework and thinking skills to fundamental human issues, dilemmas, and moral questions.
6. Develop a healthy skepticism toward such matters as issues stated too simply, issue options defined too narrowly, solutions that imply little or no cost, or solutions that are devoid of humane considerations (e.g., people's feelings, values, preferences).

Defining Economics for Young Adolescents

Designing an effective economic education program for young adolescents requires clarity in the definition of economics, economic literacy and economic reasoning. The economic literacy required by the average citizen is not synonymous with the discipline of economics. Further, the role of the normative or values dimension in economic literacy must be clearly articulated.

Defining Economics. Economics is the discipline concerned with the allocation of limited resources among unlimited wants. The economy, composed of economic institutions, is the organized way we transform resources into desired goods and services. Economics is the study of how this process works.

Economics is both a body of knowledge and a way of thinking about certain phenomena. It includes a variety of related concepts, generalizations, theories and models that describe the ways limited resources are allocated. Economists have stated that economics depends upon a "body of theory to provide a kit of tools with which to analyze the complexities of the real world."[4] Economics also is a methodology for investigating and better understanding how the economy works. For many professional economists, economics is an apparatus and a technique for learning about the operation of the economy. John Maynard Keynes expressed this view well when he defined economics as "a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions." [5] Keynes' "technique of thinking" is the scientific method which economists use in their search for generalizations that have broad application and predictive power. The scientific method teaches that the acquisition of knowledge must be independent of the economist's personal values. Like other scientists, economists must be objective or positive, that is unprejudiced, following truth wherever it leads, focusing on "what is," not "what should be." Friedman declared that "Positive economics is, or can be, an 'objective' science, in precisely the same sense as any of the physical sciences. . . ."[6] Economics does not involve providing practical advice about which economic policies should be adopted, but how to predict the consequences of those policies. Making economic policy requires economic literacy.

Defining Economic Literacy. Through our every day experiences, we learn about the economy. Some of what we learn is correct, much is incorrect and incomplete. Boulding has suggested that the goal of economic education is to move the ordinary citizen from a "folk" knowledge of the economy to the more comprehensive knowledge of professional economists.[7] Thus, becoming economically literate can be viewed as the process of gaining a more complete and accurate knowledge of the economy, knowledge that is progressively more like that of professional economists.

Economic literacy involves more, however. It is not synonymous with the discipline of economics, but draws on that discipline. It is different in several ways. The discipline of economics seeks to discover new knowledge. Economic literacy involves individuals knowing and applying fundamental economic ideas to make rational decisions about the use of limited resources. An economically literate individual has a general understanding of the institutions which comprise our economic system and an accurate understanding of basic economic knowledge. Such an individual uses that knowledge to conduct objective, reasoned analysis of economic issues. Economic reasoning, a highly transferable skill, is the central benefit of education for economic literacy. Thus, economically literate citizens enjoy a more complete understanding of their world, are better able to make reasoned decisions, and are more fully in control of their economic futures.

Economic literacy also differs from the discipline of economics in its normative, or values, dimension. Through economic reasoning, individuals try to manage the use of their limited resources in ways that will lead to the most complete fulfillment of their goals. In general, a resource should be diverted from less important to more important uses. Doing so requires an understanding of what one personally values in order to determine which choice is most likely to further those values. While the discipline of economics can be descriptive and value free, the application of economic knowledge cannot be separated from the values of those using it. Decisions among alternatives involve values. The discipline of economics provides information about the probable consequences of various policy alternatives. Economic reasoning gives individuals the tools to choose those alternatives which will best further personal and societal goals. Thus, being economically literate must include a knowledge of what we value, both individually and as a society.

Defining Economic Reasoning. Economic reasoning refers to a system for making decisions. Since economics deals with choices about the use of limited resources for unlimited wants, decision-making is the central skill of economics. Economic decision-making is a logical, reasoned approach using economic concepts and generalizations. This method of analysis is thought by many, both in and out of the economics profession, to constitute the unique and most productive contribution the discipline has made to social scientific thought.

Economic decisions involve these six steps:

1. Clearly identify the details of the decision situation. What choice is involved? What are the details?
2. Determine what personal or social goal(s) are to be attained. What are you trying to achieve by the decision? Which goals are of highest priority?
3. Identify all the alternative choices. What possible choices could be made?
4. Consider each alternative choice and its consequences. What are the costs, benefits and consequences of each alternative?
5. Decide on the best alternative for reaching the desired goal(s). Which alternative is most likely to reach the goals? Which alternatives are most feasible? Which have the least undesirable effects?
6. Review and evaluate the decision. Did it help attain the desired goal? Did predicted consequences occur? Did it maximize benefits that could be obtained from the resources used?

The following economic relationships are useful as we make economic decisions: trade-offs, law of supply and demand, marginal analysis, cost-benefit analysis and short-term and long term effects.

Trade-Offs. Decisions about the use of productive resources seldom become mutually exclusive. We do not chose between guns or butter, but between relative amounts of guns and butter or various production possibilities. In making decisions, it is imperative to consider the trade-offs, or choices, being made between alternative uses of the resources.

Laws of Supply and Demand. The laws of supply and demand state relationships between quantities demanded by consumers and quantities producers are willing to supply at a given time, assuming all other conditions remain constant. The law of demand states that as price increases, quantity demanded decreases, and conversely, if price decreases, quantity demanded increases. The law of supply states that, as price rises, producers are willing to increase the quantity supplied. As price falls, the quantity producers are willing to supply also falls. The tendency in the economy is for the quantity demanded and quantity supplied to move toward an equilibrium price at which the quantity producers are willing to produce is identical with the quantity consumers are willing to buy.

Marginal Analysis. Economic decision makers attempt to make choices that maximize output and satisfactions. Marginal analysis is used to determine the value of producing or consuming an additional unit of the same good or service. The law of diminishing marginal utility teaches that additional quantities of goods yield successively smaller increments of satisfaction. Marginal productivity shows us the additional output received by adding an additional unit of resources as input.

Cost/Benefit Analysis. Every decision has costs and benefits. By examining the costs associated with each decision in relation to the expected benefits, we attempt to make choices that maximize benefits for the least cost.

Short Run and Long Run. When examining the consequences of a decision it is important to consider the long term, as well as, the immediate effect. A choice that has a less desirable short term effect may be the better choice if it has a much more desirable long term effect.

Selecting Economic Content for Young Adolescents

Of critical importance to the success of an economic education program for young adolescents is the economic concepts or generalizations chosen to be taught. In time, research may identify which concepts or generalizations are most important, but for now, only advanced mathematical concepts can be excluded. Two scope and sequence projects provide some guidance for selecting content. Recently published by the Joint Council on Economic Education is "Economics: What and When," a report which suggests appropriate economic content for grade level spans.[8] Also, Armento has produced another scope and sequence document that suggests economic content by grade level.[9] Actually, most economic content can be taught to young adolescents if it is instructed in an appropriate manner (see following section on teaching economics to young adolescents). Still, some concepts are more pertinent for young adolescents than others.

The concept of "economic landscape" provides additional help in selecting and presenting appropriate economic content for young adolescents. Economic landscape refers to the parts of the economy encountered by students aged twelve to sixteen. It consists mostly of businesses, such as banks, retail stores, farms, factories, service shops and products familiar to students. But also includes churches, schools and government agencies. Any portion of the economy that is commonly part of the experiences of students is in their economic landscape. Students should learn how these institutions help us meet our material needs.

By consciously building on their economic landscape, economic educators can link new knowledge to students existing information base and, at the same time, give students new insights to familiar institutions and events. The local factory is seen as more than a place where people work. Students see that at the factory human, natural and capital resources are combined to produce goods desired by consumers, the sales of which produce income for workers and profits for investors. The clothing store at the shopping mall is part of a complex distribution network that serves producers as much as customers. Scarce products are efficiently rationed in a convenient manner among millions of customers all across the country. Banks can be seen not just a impressive buildings, but as institutions that serve the needs of both savers and borrowers to the mutual benefit of both groups.

Focusing on products and services of interest to students provides a second way to investigate their economic landscape. There is no shortage of products and services directed at young adolescents. They make numerous decisions about the purchase of such diverse products as acne creams, compact disks, fast food and clothing. By examining the consumer choices they and their peers make, students can better understand economic reasoning. They also realize that their choices affect what products are produced.

A third way to view their economic landscape is as a variety of social roles they play. Family member, member of social groups, friend, worker, consumer and citizen are among these roles. By examining the economic dimensions of each role and how the roles relate to one another, students will gain a more sophisticated understanding of the economy. In addition, examining social roles provides right opportunities to examine societal values, moral dilemmas and value conflicts. Further, since examples of these roles can be found locally, examining social roles provides another effective way to better understand their local community.

Teaching Economics to Young Adolescents

"Complexity and unreality--these are the two great barriers to vitalizing economic education" declared Harold Clark, an economic education reformer in 1940.[10] His comment, referring to both the selection of economic content and the manner of its instruction, is almost as true today as then. In many classrooms, economics instruction is little more than memorization and regurgitation of facts and terminology with minimal student understanding. Such teachers are prone to adopt the jargon of the professional economist without the understanding, resulting in a tyranny of terminology in which labeling of phenomenon is believed to be equivalent to comprehension.

Instead, the methods of teaching economic content to young adolescents should capitalize on the special characteristics and abilities of young adolescents. On the college level, economics is appropriately taught as an abstract subject. Unfortunately, that method of presentation of economic content has dominated the way economics is taught at all grade levels. If economics could only be presented as an abstract subject, it would be most inappropriate for young adolescents. But economics does not have to be abstract. Economics is a part of our daily lives. It is a discipline we use whenever we decide how to use any scarce resource, whether it be our income, our time, or some other. We cannot escape economic decisions. They invade almost every part of our existence. College-level abstract economics is distilled from real world events. For young adolescents, we need to get closer to those real world events, largely avoiding mathematical models and advanced analytical tools. We need to bring economics back to the level of people working together, in an orderly fashion, to supply the goods and services we need.

The appropriate presentation of economic content to young adolescents should:
1. be concrete;
2. show people involved in the economy;
3. involve the students actively in the learning process; and
4. relate new knowledge to what students already know.

Applying these principles promotes the learning of economics by marrying abstract economic theory with real world processes, thus applying what we know about how people learn to the study of economics.

Concrete. Young adolescents will benefit most from a concrete presentation of economic ideas. These students are in (or approaching) a transition in their thinking ability from concrete operational to formal operational. To understand the importance of this change in thinking ability for economics education, we need to briefly distinguish between concrete and formal operational thinkers.

Concrete operational thinkers are able to classify and order objects, hold two or more variables in their mind simultaneously, and reconcile apparently contradictory data. Their ability to reason about physical and social events, however, is limited to those they have observed or participated in. In contrast, formal operational thinkers are able to reason about economic events that they have not observed or participated in. They can manipulate information in new ways. They can begin to deal with relations among relationships, such as proportion. They can evaluate their own thinking. They can think about thinking. They can consider verbal statements and propositions and comprehend abstract ideals like justice and freedom. It is important to remember that these are not discrete, static stages which appear overnight. Rather, they are overlapping stages of continuous development.[11]

Even though young adolescents are only beginning to become formal thinkers and some are further in the transition than other, all will benefit from a concrete approach to the teaching of economics. Concrete experience will help them learn abstract ideas, for it is the building material from which abstract ideas can be constructed.[12] By manipulating empirical data gained from concrete experience, students are able to develop abstract concepts. Even those students who are already thinking in a formal manner benefit from concrete experience.[13] Actually, formal thinkers may learn better from concrete experiences than concrete thinkers.[14] Thus, students might reflect on the role scarcity plays in their own lives. What recent decisions about scarce family resources have they or their families been forced to make? How did they finally choose between various alternatives? Why did they decide to buy a computer instead of having a longer family vacation? Building on such concrete experiences is the most effective way for young adolescents to develop understanding of abstract ideas.[15]

People-Oriented. For young adolescents, it is important to stress that the economy is made up of people making decisions. These youngsters, newly conscious of their peer group, are developing new relationships, self-images and are beginning to think seriously of their own career choices. Putting the emphasis on people active in the economy builds on these emerging interests and new relationships. The use of concrete situations is promoted and students are able to see better how they fit into the economic system.

Actively Involved in Learning. Fortunately, the discipline of economics provides many opportunities to simulate economic activities within the classroom. Students can, for instance, operate a class store. They can establish a budget for their own classroom. They can engage in many simulations and games which reflect economic reality. These activities further accentuate the involvement of people in the economy and show the relationship between discrete economic concepts. Interactions within the economic system are made clearer by these activities. Further, and perhaps more importantly, activities promote learning. By involving more senses, activities increase the possibilities for students to learn.

Research suggests that active involvement improves both immediate and delayed recall of factual information. As a result of actively participating and seeing an economic concept operate, the student can develop an understanding of symbolic representations of the economic concept. This process gives the student the opportunity gradually to learn a principle from its concrete representations.[16] A market simulation in which students buy and sell goods at different prices, record their transactions, analyze them and create their own supply and demand graphs is superior to presenting young adolescents with arbitrary supply and demand graphs and then analyzing those graphs. By carrying out the transactions that make up the supply and demand data, students are involved actively. The data has new meaning for them because they have experienced it.

Experiences also provide concrete input from which to develop economic understanding. Students can act upon the content being learned and use it in new situations, thereby learning how to manipulate information. Using the information and manipulating it leads to a deeper understanding.[17] Just knowing the terms of economics, the technical "jargon," does not guarantee understanding. Often students can learn the correct definitions or the "right" answers without understanding what they are saying. For example, many eighth grade students recently interviewed by the author commented that the major difference between our economic system and that of the Soviet Union is that we have freedom of choice and the Soviets do not. But later in the questioning, the same students often said that economic decisions in our system were made by the government. The contradiction was not clear to the students who have memorized the right answer to why our system is different from the Soviet's, but don't understand what that distinction means.

Linkages. New knowledge must always be linked to what is already known. Economic knowledge presented to young adolescents must relate to their personal body of knowledge, yet be sufficiently novel to capture their interest.[18] We all have contextual frameworks which we have learned over time. New knowledge is more powerfully learned if it hooks into our framework in a meaningful way. New knowledge, also, may cause our framework to be adjusted. But if the new knowledge is unrelated to previous knowledge or to our conceptual framework, then it will merely be memorized and forgotten, or not learned at all.

Economics in the Curriculum

Economics content can be added to the courses taken by young adolescents either by infusing it into other courses or by establishing a separate economics course. There are advantages and disadvantages to both methods.

Infusion of economics into another course such as American history, civics or geography can take one of several forms. First, the lesson may be unrelated to the content of the course. Like a current events day, the economics lesson fills a period, but is not connected to other topics being studied. It is outside the normal content flow of the course. Second, examples of specific economic terms can be selected from the content of the course. For example, students could be taught the term "scarcity," and then, during the study of colonial America, asked to find examples of scarcity and the decisions people made because of it. Other concepts such as opportunity costs, incentives, etc., can similarly be explained with examples from the courses. Third, an economic aspect of a topic already present in the course may be taught. For instance, the Industrial Revolution, the Great Depression, panics of the 1800s, establishment of the national bank and its ending under Jackson, and the impact of economic growth on society are economic topics which could be taught in an American history course. Infusion into existing courses may be as short as a few lessons that are taught in one or a few periods, or as long as an entire unit which may take several weeks to complete.

There are some serious problems with the infusion strategy. Taught in the context of a course, economic ideas have a content framework to which they can be related, but that framework often is ignored and the lessons are often just "dropped" into a course. Further, separate infusion lessons are prone to produce a disjointed coverage of economic content rather than an organized, sequential one. When the economics content is taught with the normal content of another course, it is difficult to know how much economics is actually being taught. Were one or two lessons taught or many? An additional complication is that history, geography or civics books do not define economic terms adequately. Their purpose is not to teach economics, but to teach history, civics and geography. Often, these textbooks, written by individuals not knowledgeable about economics, contain factual errors and important omissions. To compensate for the shortcomings of these textbooks, teachers using the infusion strategy must purchase and use supplemental economics materials. But purchasing additional materials is expensive and awkward. Also, it often leads those promoting economics education to focus on individual teachers changing their own classroom curriculum instead of district-wide or even school level curriculum change.

Despite these problems, infusion has been the primary means for presenting economic content to young adolescents. The power of infusion is its potential to teach all students, not just those enrolled in economics classes. Further, since economics is not confined to a single course, economic content can be repeated year after year. Perhaps most importantly, infusion of economics is usually easier to achieve than curriculum change which involves substituting a new course for an existing one. Changing the status quo is difficult. The dominant social studies course sequence was originally recommended by a National Education Association Committee in 1916.[19] Once established, this sequence has been difficult to change. Teachers are trained to teach those courses and textbooks are published for them. Needless to say, an economics course is not yet part of the traditional curriculum for young adolescents.

Nevertheless, a growing new trend is the establishment of a semester or quarter course in economics for grade seven, eight, nine, or ten. In a few school districts, such courses have been offered for years, but those districts are the exception. Part of the new interest in economics for young adolescents is due to the activities of the Foundation for Teaching Economics (FTE) which has selected young adolescents as its target audience. FTE funds the creation of student materials designed to make it easier for teachers to give instruction in economics. FTE funded the creation of the first textbook specifically designed with a fresh approach for young adolescents.[20] Using case studies of the production processes of common products, the text shows economic ideas being used by individuals. Numerous activities provide many opportunities for students to use their new information. The text can be used as the basic book for a one-semester economics course.

The Foundation for Teaching Economics also funds the development of other print material, filmstrips and videos. All these student materials are especially designed for young adolescents and provide teachers with materials--tools--with which to teach economic content to young adolescents. FTE's materials are in use in all 50 states.

The Foundation for Teaching Economics is not alone in its efforts to promote economics education for young adolescents. The National Council for Social Studies' statement "In Search of a Scope and Sequence for Social Studies" recommends a one-semester course in economics for young adolescents in eighth or ninth grade.[21] The NCSS report suggests that the economics course could be paired with a one-semester law education course to create a full year of social studies instruction. Further, Junior Achievement offers a semester long program called "Project Business," taught by a local businessperson who takes over a class for one period a week. The program utilizes the businessperson's experience, but has a standard topical structure. The Joint Council on Economic Education has produced "Give and Take," a succesful film series targeted for young adolescents. In addition, the Council and the FTE have worked together on Strategies for Teaching Economics: Junior High School Level (Grades 7-9) and the Test of Economic Knowledge normed for grades eight and nine.[22]

As the importance of economics for young adolescents becomes more well known, it is expected that the number of separate courses as well as the amount of infusion into existing courses will increase considerably in the future.

Conclusion

Young adolescents are confronted with dramatic changes as emotional, psychological, social and physical beings. These students are beginning to confront economics in many aspects of their lives. Economic choices are a daily event for them. Therefore, the introduction of economic understanding for the young adolescents is both reasonable and important.

Sound economics instruction needs to present challenging learning tasks which actively involve the learner and which recognize young adolescents' emerging capacity for abstract thought. Economic reasoning has been stressed. The economic landscape of young adolescents has been examined and three aspects detailed: institutions in the economy encountered by the young adolescent; products and services of interest to the young adolescent; and social roles played by and observed by the young adolescent.

Economic instruction for the young adolescent can be accomplished without teaching the full range of ideas and vocabulary from the economics discipline. This paper rests on the assumption that to become effective, participating citizens, and for the U.S. economic system to remain viable and dynamic, students need a basic understanding about how our economy works and a method of analysis to examine the economy.

FOOTNOTES

1. E.M. Beck, ed., Bartlett's Familiar Quotations, 15th ed. rev. Letter from Thomas Jefferson to William Charles Jarvis, 28 September 1820, (Boston: Little, Brown and Company, 1980).
2. R.A. Banaszak, "Speaking About Economics" (San Francisco: Foundation for Teaching Economics, 1985).
3. J.E. Davis, Teaching Economics to Young Adolescents: A Research-Based Rationale (San Francisco: Foundation for Teaching Economics,1987).
4. National Task Force on Economic Education, Economic Education in the School (New York: The Committee for Economic Development, 1961).
5. J.M. Keynes, The Scope of Political Economy (New York: MacMillan Co., 1930).
6. M. Friedman, "The Methodology of Positive Economics," in Essays in Positive Economics, ed. Milton Friedman (Chicago: University of Chicago Press, 1953).
7. W.L. Hansen, "Are Americans Economically Literate?" in Economic Education: Investing in the Future, ed. by William H. Peterson (Knoxville, Tennessee: University of Tennessee Press, 1982).

8. J. Gilliard, Economics: What and When (New York: Joint Council on Economic Education, forthcoming). See also P. Saunders, G.L. Bach; J.D. Calderwood; and W.L. Hansen, A Framework for Teaching The Basic Concepts (New York: Joint Council on Economic Education, 1984).

9. B.J. Armento, ed., Scope and Sequence for Economic Education K-12: A Proposed Framework (Atlanta: National Specialized Center for Learning Theory and Economic Education, Georgia State University, 1987).

10. H.F. Clark, "Vitalizing Economic Education," Social Education 4 (1940): 397-403. See also, Clark, H. F., ed. Economic Education, 11th Yearbook (Washington, D.C.: National Council for the Social Studies, 1940).

11. B. Inkelder and J.Piaget, The Growth of Logical Thinking for Childhood to Adolescence (New York: Basic Books, 1958) and E. Labinowicz, The Piaget Primer: Thinking, Learning, Teaching (Menlo Park, CA: Addison-Wesley, 1980).

12. D. Ausubel, "The Transition from Concrete to Abstract Cognitive Functioning: Theoretical Issues and Implications for Education," Journal of Research in Science Teaching 2 (1964): 261-66.

13. L. Cantu, and J. Herron, "Concrete and Formal Piagetian Stages and Science Concept Attainment," Journal of Research in Science Teaching 15 (1978): 135-143.

14. D. Sheehan, "The Effectiveness of Concrete and Formal Instructional Procedures," Dissertation Abstracts 31 (1970): 2748A.

15. J. McKinnon and J. Renner, "Are Colleges Concerned with Intellectual Development?" American Journal of Psychology 39 (1971): 1047-1052.

16. W. Wollman and A. Lawson, "The Influence of Instruction on Proportional Reasoning in Seventh Graders," Journal of Research in Science Teaching 15 (1978): 227-232.

17. L. Nucci and N. Gordon, "Educating Adolescents from a Piagetian Perspective," Journal of Education 161 (1979): 87-101.

18. G. Kolodiz, "Cognitive Development and Science Teaching," Journal of Research in Science Teaching 14 (1977): 21-26.

19. Committee on Social Studies, National Education Association, The Social Studies in Secondary Education, Bulletin 28 (Washington, D.C.: National Education Association, 1916).

20. E.U. Clawson, Our Economy: How It Works, 3rd ed. (Menlo Park, California: Addison-Wesley, 1988).

21. National Council for the Social Studies, "In Search of a Scope and Sequence for Social Studies," Social Education 48 (1984): 249-62.

22. R. A. Banaszak and E.U. Clawson, Strategies for Teaching Economics (New York: Joint Council on Economic Education, 1981); and Walstad and Soper, Test of Economic Knowledge (New York: Joint Council on Economic Education and Foundation for Teaching Economics, 1987).

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Chapter Nine

AT-RISK STUDENTS AND ECONOMIC EDUCATION: CRITERIA FOR EVALUATION

By Judith Staley Brenneke

The year 2000 is only twelve years in the future. The start of a new century. The beginning of a clean slate. A bright future is ahead of us--or is it? Today's kindergarten student will be graduating from high school in the year 2000. Or, at least some of today's kindergarten students will be graduating. Others will be sitting on the sidelines, unable to function in the labor markets, a possible liability to society. The Hudson Institute recently released a new study which has determined that between now and the year 2000, over 50 percent of the new jobs created will require some post-secondary education. It has also been predicted that by the year 2000 one out of three public school pupils will be nonwhite. Considering that the current dropout rate for blacks is 40 percent higher than for whites, while Hispanic rates are 250 percent higher than white rates, the educational attainment of the workforce of the year 2000 looks pretty bleak.[1]

At-risk students--at risk of not completing high school--are today's current issue in education. Is this a new trend? Why, all of a sudden are students dropping out of the educational system? Is there anything that can be done to prevent their dropping out, or to encourage them to drop back in? By reviewing research on the issue, can characteristics of an effective program to deal with this problem be determined? What role can economic education play in this equation?

This paper will review current research in the educational literature on the at-risk student and programs designed to encourage this student to remain in school and will develop a set of criteria that prospective funders of these programs as well as program developers may use to evaluate new programs. Meeting these criteria will not guarantee a successful program. However, programs not meeting the criteria should be considered questionable as to their ability to deal with problems inherent in at-risk students. Finally, this paper will apply these criteria in an evaluation of one new economic education program for at-risk eighth grade students in Cleveland, Ohio.

What is an At-Risk Student?

The at-risk student is currently of great concern to the general population. However, this massive failure of students to complete high school is nothing new. In 1900 the dropout rate in the United States was 90 percent--in 1940 the dropout rate was 76 percent--and in 1984 the national dropout rate in the United States was 25 percent. An examination of these statistics would show that, in fact, the rate has declined steadily over the past 88 years.[2] Even an examination of 1986 dropout rates in major cities throughout the United States (38 percent in Philadelphia, 43 percent in Boston, or 46 percent in Cleveland) shows a decrease over the 1940 dropout rate.[3]

However, it is the Hudson Institute's declaration of the educational attainment needed by tomorrow's workforce that brings the problem into focus. In 1900, and even in 1940, the dropout could find employment in a booming economy with a multitude of low-skilled, high-paying jobs available. In the year 2000, there is no guarantee that the high school dropout will find a place in the workforce. In the past, there was concern for workers who never went to school. "When the society is still trying to serve the 'never in' educationally, the dropout is not a problem."[4] Today, the system has been ultimately successful in making sure that everybody has had "some" schooling, so society's concern can concentrate on those not completing high school--the student at-risk of dropping out before completion.

Characteristics of Effective At-Risk Programs

A review of the literature will identify increasing concern for the at-risk student during the past few years. Although "conclusive evidence documenting significant program effects is even more rare than careful evaluation"[5] is as true today as it was in 1986, an increasing number of programs are being attempted by school districts with varying degrees of success. Some studies such as the National Governor's Association Task Force on Readiness stress infant and early education; [6]others stress the "effective schools" concept and the role of school administration, teachers, and interaction between these groups and the students .[7]

However, in examining the literature on school age dropouts (as opposed to preschool readiness), one can identify characteristics basic to effective programs for the at-risk student.

Although one may argue that "characteristics that would be effective for those learners . . . (described) as at-risk would also be effective for those learners not included in that group,"[8] the simple fact is that school systems do not have the resources available to offer a program such as this to all students. Most students can function and succeed without this intensive use of resources. However, there appears to be a segment of the student population for whom this intensive activity is necessary in order to ensure their continuance within the school system. Thus, it appears desirable to identify this segment of the student population and develop specialized programs and assistance to insure their success in the educational system. These should contain the following characteristics:

1. Assistance for at-risk students should begin at as early an age as possible. Adequate nutrition for the developing fetus is essential. A recent study in Louisiana compared two groups of children, those whose mothers had received food supplements and those whose mothers had not. Their findings indicate that "those in the first group showed higher IQ, longer attention span, and better grades in school."[9] In addition, research indicates that youths that have been retained in one or more grades are a large component of the dropout population.[10] Thus, it is essential that the basic skills be mastered by all students at an early age. Without these skills, the student will fall increasingly behind.

2. The school atmosphere must reflect strong cooperative leadership with a "caring" attitude toward the students and remedial assistance as well as a challenging curriculum. The program should allow teachers the authority and responsibility to meet student needs. Lines of authority can not be as diffuse as is usually the case in large school settings. The curriculum should be built on well-defined standards with an orientation toward excellence. Students need not only remedial assistance in basic skills, but they also need to be challenged by new ideas, skills, and learning. The curriculum should be designed to give the students control over their educational and occupational destinies. "As individuals and groups perceive their capacity to change the system diminish, they will respond by not trying to take control . . . Rather, they will drop out."[11]The curriculum should be individualized, be built on clear objectives with positive feedback and evaluation, and should contain an active role for the learner in what is being taught.[12] Standards must be set and enforced. The school should be oriented toward the individual student with an extended role for teachers involving parenting, counseling, and mentoring.

3. Class sizes must be smaller. Indiana recently investigated the achievement of first graders in large classes and those in small classes (less than 20 students per class) with the significant result that "small classes bring more academic gains."[13]

4. Incentives and a "real-world orientation" must be provided to encourage the at-risk student to remain in school. "Learning is not enough, nor is earning--there needs to be a link between learning and earning."[14] Through a strong vocational emphasis, students can reinforce basic skills as well as learn practical job-related skills.[15] This practical orientation appears to be more successful for this at-risk population than the traditional theoretical orientation. However, it should be noted that the incentives do not always require cash. Especially at the lower grades, merely becoming involved in the school or community may provide enough incentive and challenge. Strategies can include remedial basic skills, parental involvement, work experience/job placement, counseling, supportive services, and vocational (skill) training.[16]

5. Increased interaction between the schools and outside agencies is desirable. Through a coalition of schools, universities, the business community, and governmental agencies increased resources (both human and monetary) can be found Individuals to act as role models and to assist in content development can be found outside the bounds of the school building. The dynamic, successful program utilizes all resources available from a variety of sources.

Although most programs that have been shown to be effective include additional characteristics, those described above appear to be consistant from program to program.

Evaluation Criteria for At-Risk Programs

A result of increased concerns about any "new" problem is the development of new programs to "solve" the problem, and the search for funds to support these efforts. If some common basic characteristics can be identified in successful programs for the at-risk student--then new programs should at least contain these basic characteristics. The potential funder, and the potential program developer, can then have some assurance that the basic needs of the at-risk student are being met. If the new program does not include these basic characteristics, then a rationale should be identified for ignoring them. This rationale might involve an orientation toward a specific grade level, (i.e., the program is being developed for eighth grade students; therefore, activities directed toward the infant and primary school age child are not applicable).

It is essential that funders and program developers be aware of research into the at-risk student and that any program to be undertaken be evaluated not only on a new idea of "how to approach this problem" but also on the needs of these students as identified in the research. Therefore, any program designed for the at-risk student should be examined to insure the inclusion of the characteristics previously introduced:

1. Assistance for at-risk students should begin at as early an age as possible.
2. The school atmosphere must reflect strong cooperative leadership with a "caring" attitude toward the students and remedial assistance as well as a challenging curriculum.
3. Class sizes must be smaller.
4. Incentives and a "real world orientation" must be provided to encourage the at-risk student to remain in school.
5. Increased interaction between the schools and outside agencies.

Use of these common characteristics as a criteria for evaluation of programs can be illustrated at the end of this paper through the evaluation of an innovative program for eighth grade nonpromotes in the Cleveland Public Schools. However, it would be useful at this time to examine the role of economics education in the teaching of the at-risk student.

Economic Education and the At-Risk Student

In 1986 Michael A. MacDowell made an extremely effective case for the inclusion of economics in the education of at-risk students:

> At-risk students live in a cultural milieu that provides few opportunities to experience even the most rudimentary features of our contemporary economic system or the most "common sense" rules of economics. Unless the schools effectively introduce these students to the essential features of our economy and their potential roles in it, the students most likely will miss it altogether. There is no reinforcing mechanism, either at home, in the community, or in other institutions, that teaches basic economic understancing to the at-risk student. In the long run if the schools fail to provide economic education, then we will have done nothing to raise still another cohort of at-risk students from a subsistence level of participation in the economy.[17]

If a characteristic of successful programs is the introduction of the "real world" into the curriculum (and the students lives) then economics education provides the basis needed to understand this real world. It is not enough to simply learn how to apply for a job or to obtain a social security number. Economics will provide the tools with which students can analyze the system within which they are going to function and to determine how they will most successfully function within this system. Economics education can provide the motivating factor so essential to retaining the at-risk student.

Application of Evaluative Criteria to a Pilot Program

During the summer of 1988, the Cleveland Center for Economic Education in conjunction with a local training firm (Fenix Circle Enterprises), the Cleveland Public Schools and the Summer Youth Employment Program of Cleveland (recipient of federal JTPA funds) undertook a five-week program for eighth grade nonpromotes in the Cleveland Public Schools. The program, Summer UpBeat 1999: World of Work Economic Education, was designed to actively involve students in their education through:

1. Remediation in basic skills (reading, language arts, math and social science) integrated into the study of the economics of the world of work and taught by Cleveland Public Schools teachers;
2. Paid salary for class attendance and for JTPA work experience during the five weeks;
3. Promotion to ninth grade upon successful completion of the five-week program;
4. Daily computer-assisted instruction in basic skills with reinforcement activities related to the economic content;
5. Continuous monitoring of student attendance and achievement by caseworkers hired specifically for the program; and
6. Weekly counseling by school counselors hired specifically for the program.

Although the program is in its final week and examination scores and achievement levels can not be evaluated, the program can (and should) be evaluated based on the criteria identified in this paper.

Assistance for at-risk students should begin at as early an age as possible. This program was designed for eighth grade nonpromote (to be promoted to ninth grade) students. This was the earliest age JTPA funds could be used to assist with funding. These are also students that have been identified by the Cleveland Public Schools as prospective dropouts upon moving to the high school (in ninth grade).

The school atmosphere must reflect strong cooperative leadership with a “caring”' attitude toward the students and remedial assistance as well as a challenging curriculum. Remediation in the basic skills formed the basis for this program. However, it was decided that these basic skills could not be taught the same way they'd been taught in the past--these students had already failed to learn using those methods. Therefore, the core of this course was world of work economic education with objectives, learning activities, and computer supplement designed to provide remediation during this study of the world of work. The teachers involved in this program were Occupational Work Adjustment instructors and were deeply committed to indvidual student adjustment and achievement. This individualized attention and “caring” attitude was extended through case workers assigned a maximum case-load of 20 students and through counselors working with a maximum of 80 students during the five weeks. Although the curriculum was written by the Cleveland Center, multiple activities were suggested throughout so that teachers could choose the activity that best “fit” their situation. The curriculum was designed to introduce the students to the American economy, provide them the economic tools needed to function in this economy, and assist them in clarifying their role in this economy. Specific modules during these five weeks are:

1. Why do we Work?
2. You're the Boss (entrepreneurship in the world of work).
3. The Economics of Work
4. Issues in the World of Work (minimum wage, unemployment, and productivity).
5. The Future of Work (economic growth).

The content was designed to be challenging and to be of interest to students at this age.

Class sizes must be smaller. The average class size for this program was 22. Although this was slightly above the recommended level, the range of class size was from 16 students up to 30 students. Not only was each class taught by an experienced teacher, but each teacher was assisted by at least one high school student. These high school students were hired to be role models, assist with mentoring, and to assist with administrative and educational activities within the classroom.

Incentives and a “real world orientation” must be provided to encourage the at-risk student to remain in school. The entire course was built around the “real world” which carried over to the classroom as well as the worksite. Teachers set their own rules and regulations and in some cases students were “docked” 30-minutes pay if they fell asleep in class. Caseworkers followed up on every absentee and teachers had the autonomy to determine how many absences were allowed before the student was “fired” from the program. Teachers were on the worksite with the students and thus, were able to reinforce worksite knowledge through the classroom (and vice versa). JTPA funds allowed us to pay the students $3.50 an hour for both the classroom and the worksite activities. The most positive incentive for the students enrolled in this program is the promotion to ninth grade upon completion of the program.

Increased interaction between the schools and outside agencies. This project was originally proposed by Fenix Circle Enterprises, a private training firm. Ultimately the program involved the local school system, a private training firm, a local university, business members of the Cleveland Center's Board of Trustees, and government funding. This coalition was brought together to assist 300 Cleveland at-risk students.

This examination of the at-risk criteria does not guarantee that Summer UpBeat 1988 will ultimately be successful. Student achievement in economics understandng and basic skills will be evaluated as part of the project. These data will be able to show success or failure. However, this analysis does indicate that this program design contains the characteristics necessary to retain the at-risk student and to meet the needs of this student.

Summer UpBeat 1988 is a high-cost program (approximately $100 per student). But the ultimate cost to society of these students dropping out of education is even higher.

FOOTNOTES

1. Dale Mann, "Can We Help Dropouts: Thinking About the Undoable," Teacher's College Record (Spring 1986): p. 311.
2. Ibid., p. 313.
3. Ernest L. Boyer, "Early Schooling and the Nation's Future," Educational Leadership (March 1987): 4.
4. Margaret D. LeCompte, "The Cultural Context of Dropping Out: Why Remedial Programs Fail to Solve the Problems," Education and Urban Society (May 1987):, p. 237.
5. Mann, p. 313
6. Jill M. Zachman, A Selected Review of the Literature on Factors and Conditions Driving the High Risk and Dropout Problem, National Origin Desegregation Center, San Diego State University, January 1987.
7. G. Alfred Hess, Jr., Emily Wells, Carol Prindle, Paul Liffman, and Beatrice Kaplan, "Where's Room 185? How Schools Can Reduce Their Dropout Problem," Education and Urban Society (May 1987).
8. Marilyn Kourilsky, "School Reform: The Role of the Economic Educator," Journal of Economic Education (Summer 1986): 213.
9. Boyer, p. 5
10. Mann, p. 308.
11. LeCompte, p. 247
12. Wehiage, et. al., 1987, p. 73
13. Boyer, p. 5.
14. Mann, p. 318
15. Stephen Hamilton, "Raising Standards and Reducing Dropout Rates," Teacher's College Record (Spring 1986): 416.
16. James Weber and Judith Sechler, "Characteristics of Exemplary Vocational Education Programs Designed to Prevent At-Risk Youth from Dropping Out," Education Leadership (March 1987): 72.
17. Michael MacDowell, "Response to L. Scott Miller," Journal of Economic Education (Summer 1986): 210.

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Chapter Ten

TEACHING BUSINESS ETHICS TO HIGH SCHOOL SENIORS

By Karen D. Horn

The time has come to teach business ethics to high school seniors. At the college and university levels, ethics has been accepted for centuries as a viable course in the philosophy and religion curricula. More recently business ethics has become an integral part of most business school curricula. Why then have unethical business transactions appeared to be on the increase in the United States rather than on the decline? Perhaps the concept of teaching ethical behavior, value judgments, and standards of conduct for businesses has missed its directional mark. Directing the instructional level of business ethics to colleges and businesses is significant but not sufficient to precipitate a change in business behavior.

There are no simplistic solutions to this ever-growing societal problem of unethical behavior in business, and the "problem" is not singular in nature. There are, however, some positive steps which can be taken by educators to improve this murky concept of business ethics. Redirecting the emphasis of value judgments in business to an additional audience is one of these steps. I will present a case for redirecting the instruction of business ethics to a level below that of colleges, universities, and businesses in anticipation that a wider exposure of the subject will create a positive impact on business transactions and the overall national economy.

Overview

Ethics has become a household word in the past several years, it has become "chic" to investigate business transactions, conduct seminars, teach courses, and otherwise provide guidance for individuals involved in the marketplace concerning their ethical dilemmas. The media has illuminated this term "ethics," and the public has accordingly become cognizant of such events as insider trading, questionable government procurements, fraudulent banking, and teenage crime. The fact that so much concern about business ethics has been generated at a variety of levels must, at the very least, be justification for analyzing it further.

Colleges and universities have been quick to jump on the ethics bandwagon offering a myriad of ethics courses to counterbalance the trend toward a "valueless" society. However, many leading educators are concerned that the efforts of colleges and universities in developing meaningful ethics courses are falling short of the mark. This spring in his annual report to the university board, Dr. Derek Bok, President of Harvard University stated, "Universities have failed to instill a sense of ethics in college students... universities increasingly input knowledge and skills in a value-free environment that leaves students to fashion their own beliefs and commitments."

Colleges and universities will eventually make inroads exposing undergraduate and graduate students to business ethics. Funding for higher level business ethics courses is massive. Since 1974, colleges and universities have experienced a constant increase in corporate contributions to establish ethics centers and endowed chairs of ethics. Presidents, chancellors, and deans are very receptive to building ethics courses into the business curricula.[1] According to a study conducted by Michael Hoffman, Director of the Center for Business Ethics at Bentley College, approximately 35,000 to 40,000 students took courses in business ethics in the 1981-82 academic year.[2] But what about the students who did not register in college for a business ethics class? And what about students who do not attend college? To concentrate exclusively at the college and university level on developing business ethics courses ignores thousands of young people each year who will never be exposed to value judgment decisions in business prior to their entry into the marketplace.

Jean Jacques Rousseau wrote, "What I feel is right, is right; what I feel is wrong, is wrong." This concept of individuality is acceptable in a free enterprise economy up to a point. There is a fine line between the "Invisible Hand" concept of Adam Smith and the above statement by Rousseau. Smith's admonition is that serving one's self interest ultimately generates what is in the best interest of the public while Rousseau's statement advocates "doing one's own thing," which generates what is assumed to be in the best interest of the individual. The members of the "me" generation are now participants of the workplace.

Those of us who survived the late '60s and '70s certainly are aware of this trend toward a value-free society and the emphasis on a "do your own thing" ethics. In our free enterprise economy, very seldom does "doing our own thing" not affect someone else. It is within this interpersonal relationship area that ethical dilemmas are established. We are all capable of noble and honorable deeds. We are also capable of ignoble and dishonorable deeds. Our deeds, whether good or bad, should not be measured in a vacuum but rather against a standard. In our country the standard is set by the majority views, and the laws are enacted accordingly. However, many of our moral decisions, value judgments, and ethical dilemmas are not within the purview of the law, but rather within ourselves in arriving at a decision on how we will behave or react. These individual decisions can impact the economy in a small way. However, on a larger scale, collective individual decisions can significantly influence the health and stability of the United States economy in a positive or negative way. It is this prevailing collective value structure that creates economic change. Including ethical behavior concepts in the economics curriculum at the high school level can effect the overall economy in a positive manner by providing students with pertinent information and questions that help them to form concrete value judgments in the marketplace, both as consumers and producers.

Justifying Business Ethics for High School Seniors

Curriculum development for any discipline is the process of planning solutions to answer current educational needs. The major justification for teaching business ethics to seniors in high school is the fact that there is a need. The author assesses this need to develop business ethics into the economics curricula by realizing that for more than ten years businesses have increased their emphasis on value judgment training; business schools have increased their course offerings on business ethics; and ethics centers have increased in number nationally (21 as of 1986).[3] Still the news is filled with business transactions classified by the general public as "unethical." While I commend the genuine efforts of industries, colleges, and universities, and the many dedicated ethicists for attempting to overcome this societal trend, the truth is that unethical business transactions have yet to slow down.

I address this topic of business ethics by carrying the message to a new audience. The need to include this new audience is also echoed by a number of prominent individuals and foundations. An Alliance of Educators recently completed a study of American High Schools, and among their findings was the following statement about teaching ethics and value judgments at the high school level: "The American public must be willing to permit open discussion of conflicting values and goals and to demand critical reasoning about ethical issues in schools."

The Ethics Resource Center in Washington, D.C. is embarking on a new program to provide materials and instruction for teachers to guide elementary and secondary students through the study of business ethics. Ivan Hill states in his book, How To Make America More Honest that "We want our education to make a case for ethics and honesty in the real world of today. Not the fantasy world of yesterday. And lest our ethics become dogmatic, we will encourage a continuous re-examination of our values in high school, college and graduate school seminars."

Although the concept of teaching business ethics at the high school level remains controversial in some circles, the need is real. Critics of teaching value judgment in a public school advocate that the basic moral principles surrounding value judgment should be taught in the home. While the author concurs in theory, in practice, the concepts of lying, cheating, and stealing are virtually never discussed in families today.

I surveyed 629 senior economic students regarding their personal values and discovered an alarmingly large percentage of these seniors admitted to moral values that society views as unstable.[6] One revealing portion of the study showed these seniors openly acknowledging a dual standard of values. The discrepancy appeared when they required a higher ethical standard for government and businesses than they did for themselves. Moreover, they saw no relationship between their behavior, their moral values, their moral judgments or their business decisions and the health of the local economy. They showed no awareness of the relationship between unethical transactions on the part of government and/or business (even though they basically disapproved) and the health of the national economy.

Another interesting facet of the study was the inconsistency exhibited between students' stated personal values and how they applied these values in their workplace. For example, 76 percent of the seniors stated that "Keeping their word" was extremely important. Yet 58 percent stated later they placed little or no importance on calling into work sick when they were not sick. The need to teach business ethics to high school seniors is here, and the time is now.

Development of Scope and Sequence

A course on business ethics should not be attempted until senior students have completed a course on the federal government. Additionally, the students should have acquired the basics of a survey course in micro and macro economics. Only after these two prerequisites are completed will students have the necessary tools to formulate meaningful value judgments for the marketplace.

Many high school teachers might be tempted to include a course on business ethics in the economic decision-making portion of the curricula. The concepts of opportunity cost and trade-offs are key ingredients to the study of economics. They precede such things as supply and demand, comparative economic systems, markets and prices, government in the market, and a whole host of macroeconomic concepts. A working knowledge of all the economic parts is essential to enable the student to reason at an evaluative level.

In planning for the development of this course, I realized the nature of the challenge for high school teachers in teaching a business ethics course. The challenge lies in not reducing the study of business ethics to a forum for the teacher to vent personal beliefs. The objective for the teacher is not to preach what is right or wrong, but to study situations and determine how one, personally, might (or should) react.

The course reflects two broad overlapping areas: (1) that government regulation is needed when individuals do not adequately police themselves, and (2) that unethical business transactions yield an unhealthy economy. The free enterprise economy assumes a large degree of political and economic freedom. This translates into individual freedom. Milton Friedman sums up this concept in Free To Choose.[7] When government regulates less frequently, individuals enjoy more freedom. Yet as individuals in society exhibit a penchant to erode the freedoms of others through their unacceptable moral decisions, the government is called upon to maintain a civilized marketplace. With increased demands for government to be umpire and arbitrator, or whatever euphemistic term the reader would like to insert for control, the individual, businesses, and society in general lose the freedoms that have established the productive, growing U.S. economy.

To study business ethics is first to examine one's personal values in order to determine how one applies these values in a business environment. The final stage should involve evaluation of how these individual values reflected in the form of ethical standards and behavior in business can decrease government regulation and contribute to a healthier economy.

Assessing Student Values

The mores of society are imputed by the majority viewpoint. To grasp a better understanding of the mores of seniors in high school, I conducted a survey of senior economic students in central Texas to determine majority viewpoints on such things as keeping one's word, telling the truth, stealing, cheating in school, and revealing a known drug dealer. While the author initially had hoped for a larger group of participants, there was reluctance on the part of some school officials to permit their seniors to participate in the survey. Though 629 senior economic students from six area high schools in central Texas did complete the questionnaire assessing personal values, the survey should not be construed as having broad universal application. At best, the survey can be used to draw a few inferences about the mores of seniors in a narrow area of central Texas. However, I believe the results will not vary significantly regardless of the geographic area surveyed. In any event, the questions and results may provide the reader with a starting point from which to build a value assessment of other high school seniors.

Ivan Hill states in The Ethical Base of Economic Freedom that, "Being ethical means more than being honest, but honesty is the beginning point of all ethical behavior."[8]Using honesty as the lodestar, the following responses symbolize the importance seniors in high school place on this value. Question: Would you cheat on an exam if you were relatively sure you would not get caught? (629 responses) 12.7 percent answered Always; 16.3 percent answered Almost Always; 24 percent answered Seldom; 29.7 percent answered Very Seldom; and 17.1 percent answered Never. Only 108, or 17.1 percent, of the seniors admit that cheating on exams is equivocally bad (and/or wrong). Is this the same group of soon-to-be adults who will be deciding such things as whether or not to cheat on income taxes, expense accounts, production costs, or government contracts? In discussing the personal value of honesty with students in class, one student indicated to the author that he did not consider cheating in school to be wrong because he had done it so often! Similar responses by students on other personal values can be found in the summary of survey results at the end of this article.

Assessing one's own personal values is essential before one can move to evaluate a level in which collective individual decisions take place. Individual behavior in the business environment sets up the situation in which the business ethical dilemma arises.

Business Environment

Business ethics dilemmas abound whether in the corporate, partner, or sole proprietor business formation. As individuals bring a personal standard of ethical behavior to their respective business formation, they are faced with alternate forms of individual standards as they fuse with the workforce. What is the study of business ethics but the study of individuals, singularly and collectively, deciding whether to lie, cheat or steal? Businesses are composed of individuals who are called upon daily to make value judgments in the best interest of the business. Therefore, to study business ethics is to analyze the "XYZ" corporation realistically, not artificially, realizing input for corporate decisions is based on individual assessments.

Business is not a separate branch of society; it is an integral part of it. The political and economic systems of the United States are based on majority views. As these majority views change, so do the laws governing society. Societal change brings about a change of direction or emphasis for businesses. Conversely, business can also bring about societal change. The basis of all this change is the individual standard of behavior in a collectivized form.

Business involves all of us. Businesses and individuals are both participants in the product and the factor market. The interchange of our personal values as individuals should not vary from our behavioral values in the business environment. In other words, value judgments in the business environment should not depart from personal individual value judgments. Thus, the environment of business is created by the majority views of individuals who make up that business. For example, the board of directors for the "ILIEALOT" Corporation believes that prefabricating the operational cost figures presented at the annual stockholders' meeting is acceptable in order to justify getting a new product on the market. If this action is acceptable to the Board, then the working environment within that corporation will most likely be one of deception from top management on down.

Even though corporations hold a more visible position with the public than other business formations, one should not automatically form negative conclusions concerning their business transactions. Unfortunately, newspapers are quick to headline corporate executive officers who steal, but seldom give even back page coverage to those who are honest.

Many corporations are offering useful educational training in the forming of value judgments for employees at all levels. Todd Barrett, in his recent article "Business Ethics for Sale," says, "With insider trading damaging Wall Street and fiscal improprieties plaguing several big companies in recent years, managers are scrambling to restore a system of values to the workplace. A new breed of ethics consultants is thriving and many companies are rushing to develop their own ethics programs."[9]

Ivan Hill suggests, "If big business wishes to go up on the good image polls, it must replace public relations propaganda with ethics. The majority of American corporations already operate with a rather high sense of honor and responsibility, but now is the time for all of them to move in this direction."[10]

Government Regulation of Business

Why does government regulate business? Businesses over the years have requested government regulation while at the same time clamoring for government to get off their backs! To many this paradox is perplexing. How can students best evaluate this truism? The author contends that business regulation over the past two hundred years in the United States has evolved because businesses did not indulge in self-regulation. Therefore, a student of business ethics needs to be aware of the historical development of government regulation of business and the erosion of personal freedoms as government regulation increases.

Historically, the United States has held the concept of economic freedom in high esteem. Even a majority of American economists can agree that freedom to become an entrepreneur is the paradigm of the U.S. economy. Early in our history economic freedom provided for the growth and stability of our nation. However, as the nation grew and the American society changed, so did businesses. Some of this change quite obviously was in the best interest of everyone within the economy. But some of the change was at the expense of others. The mass production of automobiles provided benefits for producer and consumer alike, but when exploitation of the worker was used to justify the end, the public cried for relief.

As industry grew, so did ethical dilemmas of business. Government stepped in to civilize the market and the workplace. When mutual trust and respect within the business industry and/or between an industry and the consumer broke down, public confidence in the industry collapsed. Government regulation was sought by some businesses to help keep the market competitive. Even today, companies are willing to accept the increased cost of government regulation if it ensures the freedom to both enter and compete in the market. The company who voluntarily disposes of toxic wastes in a responsible fashion cannot compete in the market with the company who pollutes the stream. The cost of behaving ethically for the responsible company will eventually force his production costs beyond the acceptable level of the consumer. Moreover, how would the consumer learn about a specific manufacturer who was genuinely concerned with both protecting the environment and making a profit? Hence, government steps in to equalize, or perhaps, civilize the market.

Regulation laws result from improprieties, indiscretions, and indignities for and against other human beings. These regulations set the minimum standard for business, and whether additionally stringent laws are needed to protect the public depends on the ethical behavior, i.e., value judgments, of businesses. Some companies operate ethically above the law, some at the level of the law and some below the law. This is the setting that should be established for the student of business ethics. The experience of forming concrete judgments for the above three categories can provide practical evaluative lessons that will be carried by the students into the workplace and the market.

Government regulation did not just fall out of the sky. Regulation was created because of failure on the part of businesses to keep their own houses in order. In conjunction with the understanding of increased government regulation for businesses, students should be alerted to the reduction of personal freedoms that occurs with increased government regulation. They should realize that the regulation clock will not be turned back to a laissez faire economy, nor should it be.

So where does one go from here? The ultimate question for the student of business ethics should be: In an already regulated economy, will the current rash of unethical transactions of business create a further increase in government regulation? The corollary to this question is: What personal freedoms will survive if government does increase its control of business? Will the freedom to own private property survive, or will government move in to nationalize industry? Will the freedom to choose one's intended vocation survive? In the process of answering questions like these, the students will analyze the tenets of the free enterprise system and the characteristics that have contributed to its success.

In a society where majority viewpoints operate above the minimum standards of the law, an ethical base is formed for socially acceptable value judgments by the majority. When this happens, business flourishes, government is reduced, education takes place, and the economy grows. Why? Because a higher ethical standard has been required of business.

Unethical Conduct--Unhealthy Economy

To make a case that unethical business transactions create an unhealthy economy is somewhat axiomatic. Nonetheless, reviewing some of the more recent transgressions of business should assist students in cementing all the foregoing concepts. The recent events on Wall Street illustrate how improper value judgment on the part of brokers and investment bankers damaged the securities market and related

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institutions, large and small. The question of bilking the federal government in between the commas of a government contract continues to surface. Is there no standard of ethical behavior when businesses are dealing with the federal government because it is so big and inefficient? Where is the ethical standard for the Pentagon? If, as has been rumored, the Pentagon does offer to businesses approximately 56,000 contracts daily then the risk of bribery and corruption is certainly a potential problem. Both political and economic reverberations are felt in the United States when neither businesses nor the Department of Defense conduct their transactions ethically.

Many businesses thrive on the discretionary buying power of teenagers and realize the endless influence of their disposable income. So what about the negative economic impact if labor pushes Congress to raise the minimum wage? What might be the effects of a higher minimum wage on employment of young people? In teaching high school seniors, I contend it would be dishonest (unethical) not to warn them that many unskilled part- or full-time workers will be eliminated from the workforce if Congress increases the minimum wage.

What about the economic impact of corporations shirking their fair share of taxes? This value judgment has negative consequences at local, state and federal levels. Unethical business transactions can cripple the productive engine of the U.S. economy. The value judgment of numerous bank officers has recently devastated the economy of many states. What about deceptive advertising, insurance company insolvencies, and corporate strip-mining? Is it ethical for lobbyists, in effect, to create monopolies by pressuring legislatures to pass special licensing laws under the guise of "the public interest"? The list goes on. The case is solid. If unethical business transactions become the wave of the future, whether white, blue or pink collar, the effect on the economy of the United States will be adverse.

William Simon reminds us:

> In the long run, honesty is not only the best business policy, but the only one compatible with a free market and open, honest competition. Corruption, whether it involves bribes to secure overseas government contracts, illegal contributions to political candidates here at home, or any other form of graft or payola, hampers the efficient functioning of the market place. It results in higher prices, lessened responsiveness to the consumer, and lower quality of goods and services...business corruption is inefficient and business ethics are efficient.[11]

Ivan Hill addresses the relationship between unethical conduct and an unhealthy economy with the following brief statements: "Within America we could save billions of dollars by reducing the price we pay for crime-- stealing, embezzlement, shoplifting, and crookedness in almost every area of our economic life. Much of our inflation is directly attributable to dishonesty. The cost of government would go down....Capital formation would be easier due to greatly increased confidence in business and government."[12]

Fortunately, the study of unethical business judgments is taking place in a backdrop of honesty. The majority viewpoint in American society is still one of honesty, integrity, and honor. But to hold back the potential rush, as Dr. Bok suggested, toward a "value-free" society, the study of business ethics needs to be expanded to the senior in high school. They need to participate in answering, "Shall we be honest and free or dishonest and policed?"[13]

As business assesses the present and looks to the future, it also needs to inject some honest, ethical behavior into its structure. The time has come to teach business ethics to an ever-expanding audience, and one of the best places to begin is with young people soon to enter the workforce as adults. Why not teach business ethics to seniors in high school? The need is present. The solution to answer this need can also be present in the classrooms of responsible educators.

FOOTNOTES

1. Harvard Business School, beginning with the Fall 1988 incoming class, will require all students to take a mandatory course in business ethics. The school also promised more ethical discussions in other courses. Wall Street Journal, July 13, 1988, p.26.
2. W. Michael Hoffman and Jennifer Mills More, "Results of a Business Ethics Curriculum Survey." Unpublished report conducted by the Center for Business Ethics, Bentley College. Business, Religion, and Ethics, Oelgeschlager, Gunn & Hain, 1982, p. 208.
3. James R. Glenn, Ethics In Decision Making (New York: John Wiley & Sons, 1986), p. 248.
4. The Educational Leadership Project, "Liberal Education: A Concept for American High Schools," a program of the Christian A. Johnson Endeavor Foundation, N.Y., May, 1988, p. 7.
5. Ivan Hill, How To Make America More Honest (Chapel Hill, NC: American Viewpoint, 1974), p. 108.
6. Survey questionnaire conducted in central Texas, May 1988.
7. Milton Friedman, Free To Choose (New York: Harcourt, Brace, Jovanovich, 1980).
8. Hill, "The Meaning of Ethics and Freedom," in The Ethical Base of Economic Freedom (Chapel Hill, NC: American Viewpoint, 1976).
9. Todd Barrett, "Business Ethics for Sale," Newsweek, May 9, 1988, p. 56.
10. Hill, Ibid, p.10.
11. William E. Simon, "A Challenge to Free Enterprise," in The Ethical Base of Economic Freedom, p. 405.
12. Hill, Ibid, p.18.
13. Hill, Ibid, p. 20

BIBLIOGRAPHY

Richard T. DeGeorge, Business Ethics (New York: Macmillan, 1982).
Peter F. Drucker, "What is Business Ethics," The Public Interest 63 (Spring 1981)
Milton Friedman, Capitalism and Freedom (Chicago: Univ. of Chicago Press, 1962).
Thomas M. Garrett, Business Ethics (Englewood Cliffs, N.J.: Prentice-Hall.)
Henry Hazlitt, The Ethics of Capitalism, (New York: Educational Division of the National Association of Manufacturers, 1964).
Vincent Ryan Ruggiero, The Moral Imperative (New York: Alfred Publishing, 1973).

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COMMENTS ON SURVEY

The following questionnaire was completed by 629 senior economic students from six central Texas high schools. The author contacted eight schools in the central Texas area and six school administrators responded by agreeing to distribute the questionnaire in their senior-level economics classes. The economic teachers of each respective school chose one day within a prescribed two-week time frame to incorporate this survey into their lesson plans. Any student absent from class on the chosen day did not participate in the survey. Participation in the survey was purely voluntary and anonymous on the part of the students.

The purpose of the study was to obtain data concerning: (1) the personal values of high school seniors and, (2) the application of these personal values to themselves, to business, and to government. Looking retrospectively at this research project, there are changes the author would make to improve it. However, the author is generally pleased with the overall design of the questionnaire and believes the information obtained is useful based on the variety of questions and the number of respondents.

This study does not contain the typical statistical formulas, t-tests, high-powered mathematical calculations, or margin-of-error factors commonly used to reveal the results of a formal research project. Because of these deletions, pure economists will undoubtedly classify this study as improper and the research as invalid. However, an honest appraisal of the study indicates that either the students lied or they did not. Since the author had no control over the honesty factor of students, the results were evaluated by searching for areas where inconsistent and/or indefinite personal values appeared in the responses. In the context of statistical studies, I direct the reader to a very interesting article on the misuse of statistics in the July 11, 1988 issue of U.S. News & World Report entitled, "The Numbers Racket: How Polls and Statistics Lie."

This survey of personal values was developed to assess whether a need exists to expand the high school economics curricula to include ethical behavior of business. Now that the survey is completed, the author contends even more strongly that the need does exist.

The author in no way intends for this study to be used to draw inferences about the universe. Nonetheless, the author is hopeful the data will be of some use to other educators who are interested in embarking on this new ethics adventure for high school seniors.

RESULTS OF SURVEY FOR HIGH SCHOOL SENIORS (629 participants)

Part I: The following statements indicate a variety of ethical situations. Please circle the response which clearly reflects your judgment for each situation. Do not sign your name. Thank you for your candor and cooperation.

1. Would you cheat on an exam if you were relatively sure you would not get caught?
   Always-12.7% Almost Always-16.3% Seldom-24% Very Seldom-29.7% Never-17.1%

2. In your part-time workplace, would you provide a free good or service for a friend if the manager would not find out?
   Always-8.1% Almost Always-16% Seldom-17.3% Very Seldom-23.5% Never-34.9%

Although only 24% of the seniors responded always or almost always, the unsolicited information the author has obtained from seniors in the past several years is that an underground network of teenagers trading favors in the workplace does exist in central Texas. In fact, the author has openly dubbed it, "the teenage Mafia."

3. If you worked in a restaurant as a waitperson and you could easily skim from other waitperson's tips without being detected, would you take part of their gratuity?
   Always-3.4% Almost Always-1.9% Seldom-5.4% Very Seldom-7.9% Never-80.7%

4. You are shopping in a large city and suddenly an earthquake causes many local businesses to be severely damaged. Would you go along with the crowd and loot the stores before the police arrived?
Always-11.4% Almost Always-6.3% Seldom-9.2% Very Seldom-16.5% Never-57.2%

5. You discover a friend has shoplifted an item from the store where you are employed. Would you turn him/her in?
Always-14.3% Almost Always-19.3% Seldom-15.1% Very Seldom-20.6% Never-30.6%

6. In your capacity as a sales representative for a corporation, you discover one of your peers is advancing his career by granting illegal rebates to dealers. Would you report him to your superior?
A lways-36.2% Almost Always-28.9% Seldom-16.5% Very Seldom-10.4% Never-8.2%

7. An armored car traveling on the interstate suddenly loses control and overturns. Money begins to sail through the air. Would you stop your vehicle and pick up as much cash as you could stuff in your pockets?
Always-40.3% Almost Always-13.1% Seldom-11.4% Very Seldom-13.6% Never-25.1%

*This actually happened in Columbus, Ohio this past spring. The mayor of Columbus was so concerned about citizen ethics after this event took place that he appointed a committee to study how to educate citizens ethically. Looks like central Texas seniors need to take the course since only 25% responded they would never pick up "free" money. Note the inconsistency in the response to this question and the question (#3) on picking up someone else's tip.

Part II: Choose one of the following responses which most nearly represents the value you place on each of the statements listed below.

(a) Keeping your word:
Extremely Important = 76.4%
Somewhat Important = 17-9% .
Important = 4.7%
Not Very Important = 1.1% .
No Importance At All = 0.4%
(b) Telling the truth:
Extremely Important = 58.8%
Somewhat Important = 27%
Important = 13.6%
Not Very Important = 1.9%
No Importance At All = 1.2%
(c) Not to steal:
Extremely Important = 71%
Somewhat Important = 15.1%
Important = 10.1%
Not Very Important = 2.7%
No Importance At All = 0.6%
(d) To learn that certain businesses habitually overcharge older, wealthy people.
Extremely Important = 35.4%
Somewhat Important = 17.3%
Important = 20.9%
Not Very Important = 17.9%
No Importance At All = 10%
(e) To reveal to authorities the name of a campus drug dealer.
Extremely Important = 42.9%
Somewhat Important = 13.9%
Important = 16%
Not Very Important = 10.6% .
No Importance At All = 15.4%
(f) To not call into work sick when you are well.
Extremely Important = 10%

Somewhat Important = 11.2%
Important = 19.7%
Not Very Important = 29%
No Importance At All = 28.9%

Part III: Choose one of the following responses according to your values concerning ethical situations in business and government.

(a) Businesses overcharge the federal government for goods and services.
OK = 8.5%
Sometimes OK = 17.6%
Seldom OK = 24.4%
Never OK = 47.8%

(b) Newspapers print a story about a POSSIBLE bank failure.
OK = 21.9%
Sometimes OK = 22.4%
Seldom OK = 29.2%
Never OK = 27.1%

(c) A large corporation which produces a toxic chemical has a high death rate among employees and the EPA does not investigate.
OK = 6.6%
Sometimes OK = 3%
Seldom OK =5.5%
Never OK = 81.1%

(d) A congressperson votes on a bill according to his/her personal conviction rather than the convictions of the majority of his/her constituents.
OK = 7.9%
Sometimes OK = 9.3%
Seldom OK = 20.8%
Never OK = 61.6%

(e) A car manufacturer ignores a new special safety design in order to create a more dazzling model for the consumer.
OK = 5.7%
Sometimes OK = 7.7%
Seldom OK = 20%
Never OK = 66.6%

(f) A doctor doing pure research prefabricates his scientific findings in order to further his career.
OK = 8.9%
Sometimes OK = 9.5%
Seldom OK = 19.5%
Never OK = 62.4%

Chapter Eleven

USING THE PRINT MEDIA TO TEACH ECONOMICS

By Virginia I. Postrel

Before launching into a discussion of how teachers can use the print media to teach economics, it is necessary to clarify what we mean by "teaching economics." At the college level, there would be very little to discuss; economics is a well defined discipline, with textbooks, journals, and agreed-upon professional standards.

But at the precollegiate level (and in popular usage), economics takes on two different meanings. Most often, I suspect, it is defined broadly as "things that have to do with money." We can see this definition in action not only in the classroom but also on any Waldenbooks economics shelf, which will inevitably be stocked with books on real estate investing and dressing for success. Alternatively, we may define economics as economists do--as a way of looking at the world, encompassing such concepts as opportunity cost, marginalism, and so forth. Which of these definitions we choose has profound implications for curriculum and, as a result, for how teachers use the press in their classrooms.

If we define economics as anything that has to do with money, students may learn in class how to write a business plan, balance a checkbook, apply for a job, or read the Wall Street Journal stock pages. Here, the teacher serves as a conduit for information about the adult "real world." The press is taken as a source about that world, a way of learning definitions for the terms adults use. So, for example, the Foundation for Teaching Economics and USA Today offer a workbook for using that newspaper in the classroom. Here we find an activity sheet headed "Employment in Our Economy," in which students are to list three interesting jobs they have found discussed in USA Today, to say whether each is in manufacturing or service, to list the skills needed, and to describe the salary range.[1]

While such exercises have some usefulness, I would argue that they are not the best way to expend precious classroom hours, for three reasons. First, by relying on information that is readily available from the press and from adults already in the workforce, they waste resources; why use trained teachers and limited classroom time to teach what students can read in the newspaper themselves? Second, and more importantly, they teach uncritical thinking and, too often, incorrect information. And, finally, the alternative approach--teaching economics as a way of thinking--will inevitably convey information about the world of money while at the same time giving students powerful analytical tools.

A World of Limits

The first chapter of most introductory economics textbooks defines the field as having to do with scarcity: "The problems of economics arise out of the use of scarce resources to satisfy human wants."[2] Like any other economic player, the high-school economics course faces constraints: There is only so much time. Students only learn so fast. How, then, can we optimize learning?

Rather than cover many topics quickly--the approach of most introductory college courses--I believe that the high-school course should concentrate on a few fundamental concepts. If, at the end of a year, students know in their bones the meaning and implications of opportunity costs, marginalism, supply and demand, and elasticity, they will be far ahead of most college graduates. And, more importantly, they will have acquired intellectual tools that will serve them well not only in the world of money and business but as citizens and intellectually curious individuals.

By providing a near-infinite source of supplementary materials, the press makes such an in-depth approach possible. Analyzing news stories, spotting their underlying assumptions, and catching their errors will teach students that the theory they learn in class has real-world implications. It will also give students intellectual self-confidence, as they discover over time that they understand their economy better than most adults.

This approach necessarily implies that teachers themselves understand economic concepts. I realize, however, that it is unreasonable to assume that the typical high-school economics teacher is either a graduate-trained economist or even an undergraduate economics major. As guides to teachers (and textbooks for more advanced students), I strongly recommend two very accessible books: *The Economist's View of the World: Government, Markets, & Public Policy*, by Steven E. Rhoads (Cambridge University Press, 1985) and *The Economic Way of Thinking* by Paul Heyne (Science Research Associates, 1983). Both Rhoads and Heyne frequently use media reports to illustrate economic concepts and, often, to show fallacies in the way people think about economic problems.

Case Studies: Concepts and Illustrations

Opportunity Cost. The term cost, which all of us throw around imprecisely in our daily lives, means something very particular to economists, who often refer to opportunity cost. In economics, the concept of cost is only meaningful relative to a decision; cost entails, in Heyne's words, "the value of sacrificed opportunities."[3] If you decide to do something, you necessarily decide not to do something else.

There are two kinds of costs that tend to trip up people who haven't learned the economic way of thinking: hidden costs and phantom costs. To illustrate the difficult-to-grasp concept of opportunity cost, consider two magazine articles.[4]

The first, an *Ebony* article about Ralph Sampson's decision to stay in school rather than turn pro, provides an interesting vehicle for students to identify hidden costs. We usually think of the "cost" of a college education as the price tag of tuition, room and board, books, etc. But the story about Sampson--or any other college athlete who has to decide whether to turn pro--reveals that the opportunity cost of staying in school.

What did it cost Sampson to stay in school? He, after all, had a "free ride," thanks to his basketball scholarship. But opportunity cost of staying in school is not turning pro, and all that entails. So, *Ebony* notes in the first paragraph, graduation will be his "million-dollar day," because he has given up millions of dollars in NBA salary to get that degree. More specifically, he has given up one year's salary. (It would be interesting to have students quantify that cost by researching what Sampson earned in his first year in the NBA.) When he decided to finish his degree, Sampson also risked even larger costs: had he become injured in hid senior year, he might have sacrificed not merely one year's income but his *entire* NBA career and all the millions that would entail.

Turning pro, however, would have incurred an opportunity cost of its own--leaving school. Sampson would not have gotten his degree from one of the country's top schools. That degree has not only educational and self-esteem value but also monetary worth, especially if Sampson's pro career were cut short by injury. Second, as the article notes, Sampson hoped to win an NCAA title for the University of Virginia, and going pro would, of course, mean giving up that dream. (As it happened, Sampson never did win the big one.) For many college athletes, giving up a shot at the Olympics may be the opportunity cost that keeps them in school.

To find other examples of hidden opportunity costs, teachers might consider articles on other career decisions (go to law school versus get a job; join the Army versus go to college) or personal finance (buy a house versus rent). Additionally, business press articles on companies deciding whether to enter new lines of business or to expand operations may yield good discussions of opportunity costs.

The second article, from *Forbes*, illustrates the problem of phantom costs--costs that don't really exist--and it also shows that reporters don't necessarily know what they're talking about.[5] Economists have a saying, "Sunk costs don't count." If you've already spent the money, it's gone. What matters are *new* costs and new payoffs. Just because you've already sunk a bundle into a losing operation doesn't mean you should continue to spend money on it; unless you can turn things around, you're better off to cut your losses and get out of the business.

The Forbes article explains how AM International made mistakes and wrecked a printing-press business it paid millions to buy. But reporter Alyssa A. Lappen criticizes analysts for cheering when AM International announced plans to sell the business. "Instead of cheering, they should have been jeering," she says.

If, however, you understand that sunk costs don't count, you understand why the analysts cheered and why AM's stock price rose when it made the announcement. By selling the business, AM let investors know that it was cutting its losses and getting out of a business it couldn't run. The old costs--the $290 million AM spent to buy and reorganize the business--don't count; they are sunk costs, phantom costs. All that matters are new costs, the money that AM would pour down the drain if it kept trying to run that business.

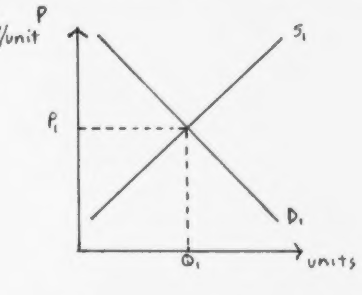
Similar analysis can be applied to public-policy choices, as well as business decisions. A Los Angeles Times article about the government's decision to sell its synfuel plant provides another example of an action that assumes sunk costs don't count.[6] The article describes a government decision to sell an uneconomical synthetic fuel plant it helped build in the early 1980s, even though the sale price would "fall far short of the $1.5 billion the government spent to build it." Students might be asked to analyze a story on mass transit systems, for example. Cities often justify continuing to pour millions into losing rail lines because they've already sunk millions into building the lines. In general, large projects that are revealed as losers before they're finished illustrate the problem of sunk costs. Teachers might look for articles on major construction projects (Houston's oversupply of office space, for instance), big public works projects (the Clinch River breeder reactor, the Concorde), and movies ("Ishtar," "Heaven's Gate").

Supply, Demand, and Elasticity. Supply and demand are the old reliables of microeconomics--for good reasons. If students leave an economics class knowing no more than how to turn real-world problems into supply and demand diagrams and to show what happens when the curves shift, they will understand more about economics than many policymakers. If, on top of that, they understand *elasticity* (or even if they have a hazy notion of the concept), they will know more than most college economics students.

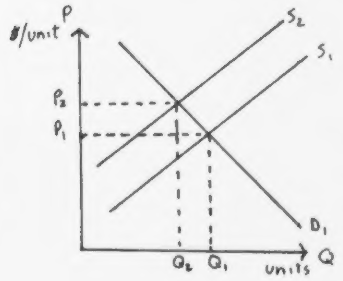
To illustrate these concepts, we'll look at articles on two agricultural markets: the market for oats and the market for cocaine. (Agricultural markets are ideal for supply and demand analysis because they are generally competitive and supply undifferentiated products.)

To start with the slightly less controversial topic, consider two articles on the oats business, one from the Wall Street Journal and one from Newsweek.[7] According to the Journal, a shortage of oats is driving up prices; the shortage is caused by subsidies that encourage farmers to shift out of oats into other crops, such as corn, wheat, and barley. The Newsweek article tells us that health-conscious yuppies are eating more oats, or at least reading more about them. Assuming that the demand for oats actually is up (and Newsweek supplies no figures to indicate that it is), we can draw a series of supply and demand diagrams to show what has happened in the oats market:

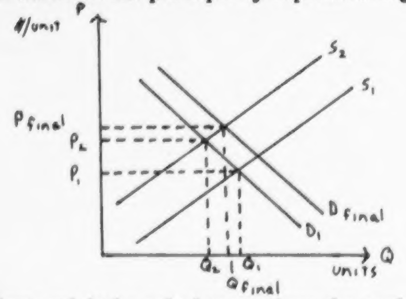
Start with a basic supply and demand diagram.



Farmers start growing fewer oats, so they supply curve shifts to the left. What happens to the quantity demanded? To the price?



Yuppies decide to shape up and eat more oats. The demand curve shifts to the right. What happens to the price? We can't tell whether quantity demanded goes up without knowing the slope of the curve and how much demand shifts. Students can illustrate this principle by experimenting with different curves.



Using other current articles, students might be asked to continue the analysis by looking at what happens when a drought hits.

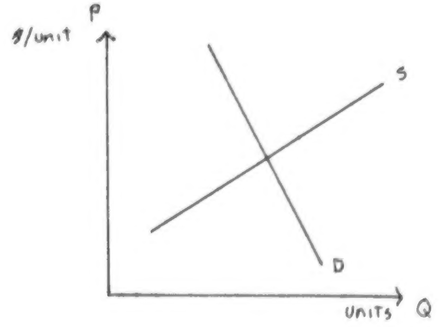
Most discussions of U.S. drug policy rely on underlying economic assumptions; illegal drugs are, after all, commercial products subject to the interaction of supply and demand. Here, however, it is crucial to consider the more difficult concept of elasticity, specifically the price elasticity of demand. Elasticity is the measure of how much quantity demanded changes when prices rise or fall. Its precise definition (which neatly eliminates problems with what units you use) is the percentage change in quantity divided by the percentage change in price.

For example, Reason is running a test to see what happens if we raise our subscription price to $14.87 from $12--a 24 percent increase. Will we take in more or less revenue than at the lower price? The answer depends on subscribers' elasticity. If total revenue is higher at the higher price, because the number of subscriptions sold (the quantity demanded of Reason) is relatively unresponsive to the price charged, we say demand is inelastic. If total revenue is lower at the higher price, we say demand is elastic. Our circulation director is hoping that demand is inelastic, that the number of new subscriptions sold will drop less than 24 percent. If we sell exactly 24 percent fewer subscriptions, it doesn't matter which price we use.

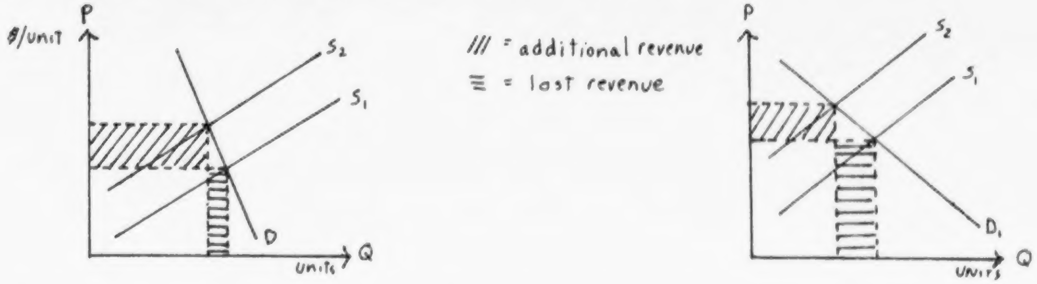
The same analysis can be applied to drugs. We generally assume that demand for illegal drugs is inelastic, that addicts in particular will buy almost the same number of fixes at high prices as they will at low prices. In drawing a supply and demand diagram, therefore, we would illustrate this assumption by using a demand curve with a very steep slope; an increase in price produces only a small drop in quantity demanded.

The New York Times uses the assumption of inelastic demand to examine drug enforcement policy.[8] This article offers an excellent opportunity to teach economics through critical reading--not to look for mistakes, as with the Forbes piece, but to look behind the printed page to the economic model in the editorialist's mind. As with oats, it helps to work through the diagrams.

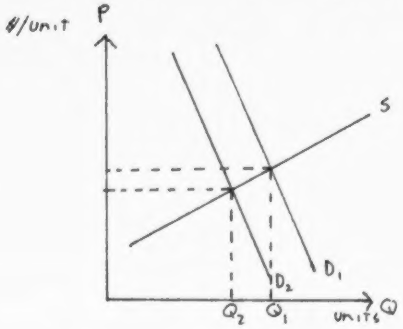
Start with a basic supply diagram, with a steep demand curve to illustrate the assumed elasticity.



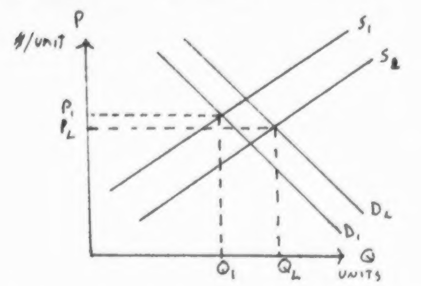
Suppose, as the Times suggests, someone--suppliers or the government--can restrict supply. The supply curve shifts to the left. What happens to the price? What happens to the dealers' revenue (which the article calls income)? How would the result differ if demand were elastic?

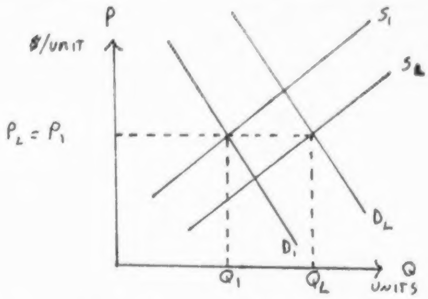


The article suggests that we try to reduce the demand. What happens when we shift the demand curve to the left?



Finally, what happens if we legalize drugs? With legal restraints removed, most people assume that both supply and demand curves shift to the right. Here exact elasticities, which are unknown, matter a lot. Without knowing them, all we can be sure is that the quantity demanded increases. Students might graph the changes using different assumptions about the shapes of the curves.





In normal agricultural markets, economists generally find that demand is inelastic--people buy about the same amount of wheat at high prices as at low. Students might be asked to go through the oats diagrams using this assumption about the shape of the demand curve. Also, using this assumption, they can show that farmers in the aggregate actually do better during a drought; overall farm income (revenue) rises.

Marginalism, Budget Constraints, and Tradeoffs. Economists talk a lot about marginal things--marginal costs, marginal utility, marginal revenue. In fact, it's safe to say that what makes economists different from the rest of humanity is that they're comfortable with admitting that they think in incremental terms. The rest of the world talks about setting priorities, as though life were a list of rankings. If you had your priorities straight, we hear people say, you'd spend less time working and more with your family. After all, isn't your family more important than your work?

But "setting priorities," while sometimes useful, is often fallacious on its face: You like being with your family more than going to work, so you should never go to work. Or, food is more important than entertainment, so you should spend all your money on food and never go to the movies.

People don't, of course, behave that way. And the reason they don't is that they make decisions on the margin: While you may like to spend time with your family, you would get more out of the next hour if you spent it working. The first loaf of bread may mean the difference between life and death to a starving person, but if you've just eaten a spaghetti dinner, you'd rather go to the movies than eat a loaf of bread.

Many government policies affect marginal costs for some people in the economy. Health insurance is good, for example, so the state of Massachusetts has required employers to provide it--without looking at the tradeoffs. A Reason article on Massachusetts's health insurance program actually works out the cost of the plan for a small business deciding whether to hire a sixth employee.[9] Since the law under discussion requires employers of six or more people to pay $1,680 a year per employee for health insurance, students might think the costs of adding a sixth employee is his or her salary plus $1,680. But, actually, the cost turns out to be $10,080--six times $1,680--plus the salary. Students might be asked to discuss how this high marginal cost of adding a sixth worker would affect a business owner's decisions: What alternatives does he or she have? Other employees might work overtime, at, say time and a half. Or the business might substitute machines for people. Using hypothetical wage rates for the other workers or costs of new equipment, students might compute the business's tradeoffs between adding a sixth employee and taking some other approach.

A pair of Wall Street Journal articles illustrates how even Congress may make an unexpected decision when faced with a tradeoff.[10] The first article, dated May 18, 1988, declares that Congress would never get rid of the UDAG program because it is too popular with politically influential developers. The second, dated June 23, 1988, says that Congress has, in fact, eliminated the program. What made the difference, since the UDAG program was so popular? A tradeoff, between the proposed space station and UDAGs.

Marginalism comes up often in discussions of tax policy, because taxes have a very large impact on how people choose to spend or invest (or whether they chose to earn) each additional dollar. Teachers can use almost any article on tax policy to foster class discussion. For example, an article from the Los Angeles Times says that Japan's Parliament has voted to eliminate the tax exemption on interest earned on saving accounts.[11] Getting rid of the exemption is supposed to "encourage consumption and spur demand for imports in Japan."

How is taxing related to consumption? The answer comes in the marginal effect, in how taxes affect the tradeoff between saving and spending. Suppose Toshio Sakamoto, a Japanese citizen, is just indifferent between saving 100 yen at 5 percent interest and spending the money on an American candy bar. A candy bar today has the same value to Mr. Sakamoto as 105 yen (the savings, plus interest) in a year. Next, suppose the Japanese government imposes the tax discussed in the article. Now if he saves his money, Mr. Sakamoto will pay 20 percent of the interest--1 yen--in taxes. The 1 yen less in interest tips the balance in favor of the candy bar.

The article says Japanese save 20 percent of their income, about four times as much as Americans. The U.S. government taxes savings interest; how does this affect Americans' marginal decisions? Students might be asked to research how different governments tax savings and what percentage of their income people in different countries save.

A second tax-related article, from the Wall Street Journal, may be too difficult for many students.[12] But its basic points are easily summarized in the first paragraph: The 1981 income-tax cut slashed the top tax bracket from 70 percent to 50 percent of income. But taxpayers in the highest tax bracket are paying a higher percentage of total taxes than they were before the tax cut. The article says this is because top-bracket taxpayers are reporting more income in three areas--wages and salaries, self-employment income, and capital-gains realization. It suggests that the change has something to do with marginal tradeoffs.

One such tradeoff is between labor and leisure. Suppose Jane Smith earns $200,000 a year as a surgeon. Before the tax cut, Dr. Smith paid 70 cents of each additional dollar she earned to the government. Now she pays 50 cents. If she has a choice of whether to do an operation and earn $200, is she more likely to do it when she gets to keep $100 or $60? If she doesn't do the operation, the government gets nothing, so more income for Dr. Smith also means more income for the government. Like the Japanese saver deciding whether to buy a candy bar instead, Dr. Smith's decision about what to do with her marginal hour--in this case, whether to use it to earn money or not--is affected by tax rates.

But the labor-leisure tradeoff doesn't explain the change completely. The article notes that self-employment income reported by top-bracket taxpayers jumped 88 percent more than expected. "To assume that this was all due to increased labor supply would imply that a professional's 50-hour week was increased to 94 hours," notes author Lawrence B. Lindsey. Instead, he suggests another marginal tradeoff--between taxable income and nontaxable benefits, including medical and dental plans and such pleasurable (and deductible) expenses as travel and entertainment. Students might be asked to discuss how they would react to different tax rates on wages and benefits. What if both cash income and health insurance were taxed--would they want as much health insurance as they would if it continued to be tax-free?

Finally, a Wall Street Journal article reports that a cut in the capital-gains tax encouraged increased savings and investment without costing the government much revenue.[13] Again, the article offers a good example of marginal effects: People decided to invest and save more because they could keep more of each dollar they earned. Since they now earn more in total, the government collects about the same total revenue, even though it collects less of each dollar. This article also illustrates how learning economics as a way of thinking can lead students to learn more about the world of money and finance. To understand the article, students need to know what the capital gains tax is. The article also provides an opportunity to discuss venture capital and supply-side economics. Students might be asked to research what "the boom in venture capital since 1978" refers to. Inc. and Venture magazines frequently cover venture capital, and the National Venture Capital Association7 might provide further information on the field.[14]

Conclusion

High-school economics classes offer an ideal forum for teaching basic microeconomic concepts that are widely applicable to many situations found in everyday life. Unlike college classes, they need not feel the urgency to cover every aspect of economics in preparation for more advanced work. Also, since high school classes meet every day and give students daily homework assignments they can reinforce the learning of difficult concepts rather than expecting students to "get it" the first or second go round.

The print media provide ample resources for the teacher who wants to reinforce textbook presentations of economic ideas. News stories, features, and editorials from a wide variety of publications, including but not limited to the business press, use (and misuse) economic assumptions and can be brought into the classroom to teach students how to apply their new economic literacy. And, once they have thoroughly discussed a particular concept, students themselves can be assigned to look for and then analyze articles that illustrate it. Successful completion of such an assignment will give students self-confidence and teachers yet more material to draw on.

FOOTNOTES

1. The Foundation for Teaching Economics and USA Today, Economics Today, 1986, p. 21.
2. Richard G. Lipsey and Peter O. Steiner, Economics, 4th ed. (New York: Harper & Row, 1975), p. 6.
3. Paul Heyne, The Economic Way of Thinking, p. 39.
4. "Ralph Sampson: Why Pro Basketball Millions Couldn't Pry Him from his Books," Ebony, March 1983.
5. "The Mess Behind the Numbers," by Alyssa Lappen, Forbes, July 25, 1988.
6. "Government's Synthetic Fuel Plant to Be Sold to Power Co-op," by Mark Lawrence, Los Angeles Times, August 6, 1988.
7. "Why Is Oats Output Down, Demand Up? Blame 1985 Farm Law," by Bruce Ingersoll, Wall Street Journal, June 10, 1988; and "America Feels Its Oats," Newsweek, July 11, 1988.
8. New York Times, July 28, 1988.
9. "Medical Mystery Tour," by Jeff Jacoby, Reason, August/September 1988.
10. "Urban Sluch Fund," Wall Street Journal, May 18, 1988; and "House Approves $59.7 Billion Bill for HUD Funding," by John Yang, Wall Street Journal, June 23, 1988.

11. "Japan to Tax Interest on Savings Accounts: U.S. Complaints Cited," by Sam Jameson, Los Angeles Times, Sept. 21, 1987.
12. *"Lessons of the 1981* Tax Cut," by Lawrence Lindsey, Wall Street Journal, May 6, 1986.
13. "Study Says 1978 Capital Gains Tax Cut Helped Boost Savings, Investment Levels," by Alan Murray, Wall Street Journal, Sept. 16, 1985.
14. A national association of venture capital firms, located at 1655 North Fort Myer Drive, Suite 700, Arlington, VA, 22209.

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Chapter Twelve

ECONOMICS AND ENTREPRENEURSHIP EDUCATION IN THE ELEMENTARY GRADES

By Francis W. Rushing

Introduction

Entrepreneurship is now the focus of discussion, and sometimes debate, among academics, practitioners, and public policymakers. Some describe entrepreneurship as the emerging academic field of the 1980s and 1990s. Others remark that it is only the rediscovery of an old notion looking for a contemporary treatment within existing disciplines (i.e., economics and management). All who enter the discussion generally conclude that entrepreneurship is important in the context of modern societies and that it warrants attention by scholars and educators.

The literature on entrepreneurship has exploded over the past 20 years. Researchers have explored the definition of the entrepreneur and entrepreneurship. They have identified many personal characteristics or attributes of entrepreneurs and discussed at great length (in thousands of pages) what the roles and functions of the entrepreneurs are within the economic environment.

The stage is now set to shift the focus of the discussion to entrepreneurship education. First, is entrepreneurship education desirable? If undertaken, will it result in outcomes that will contribute positively to the well-being of a society? Second, if desirable, when should the education programs begin and how should they be designed to most effectively achieve the broad goal of increasing the entrepreneurial talent within a society and more successfully employ that talent for the economic well-being of people?

When this topic first re-emerged in the 1970s, some college professors became advocates of the development and teaching of entrepreneurial courses at colleges and universities. As the acknowledged importance of entrepreneurship increased, some educators advocated teaching entrepreneurship in secondary schools since many potential entrepreneurs may not go to college.

In recent years, national organizations as well as local educators have been exploring entrepreneurship curricula. Most of the secondary entrepreneurship curricula, like the collegiate, emphasized the formation and management of a business after offering entrepreneurship as an alternative career opportunity.

Yet there is another set of fundamental questions to be asked: Can entrepreneurial talents or attributes be developed, and if so, can this be done in a formal educational environment? I believe the answer is "yes" to both questions.

To develop the support for these responses, this paper is broken down into three additional sections. The second section reviews the literature on the development of attributes associated (and positively correlated) with entrepreneurial behavior. The third section discusses current materials or programs which are used in economic and entrepreneurial education. The last section describes what more might be done to increase the effectiveness of entrepreneurial attribute enhancement.

Review of the Literature

Many scholars have attempted to determine what attribute is the best predictor of entrepreneurial behavior. The discussion by educators of entrepreneurship generally stumbles over the fact that in the past we have not been able to identify potential entrepreneurs. We recognize entrepreneurs through their behavior. If we can identify potential entrepreneurs, then we can teach them the requisite skills for successful "entrepreneuring." In addition, if we know the critical attributes of successful entrepreneurs, educational programming may be able to increase the total amount of entrepreneurial talent and thereby increase the future number of entrepreneurs.

In this section four studies from the literature have been selected to sample the discussion about attributes and prediction of entrepreneurship.

A. Ron Lachman in the article, "Toward Measurement of Entrepreneurial Tendencies,"[1] attempts to help establish the connection between personality characteristics and entrepreneurial behavior. The author, after considering previous research, singled out one sociological variable, achievement values, and two psychological variables, achievement motivation and dependency, as the most important characteristics to test as to their relationship with entrepreneurial activity. That is, the author hypothesized that individuals with high achievement motivation and values and low dependency needs would have a greater potential for entrepreneurial behavior than those without these characteristics.

In order to test this hypothesis, Lachman contrasted two similar groups of managers in Israel according to whether or not they were associated with entrepreneurial behavior. A questionnaire was then used to measure the three characteristics for each member of the two groups. The author's findings provided evidence to believe that an individual could be reliably placed in either group according to both the sociological characteristic, achievement values, and one of the psychological variables, achievement motivation. Dependency, however, was found not indicative of an individual being an entrepreneur or a nonentrepreneur. The conclusion of this author is that entrepreneurs can be identified by personality characteristics as opposed to a functional identification, i.e., they are entrepreneurs because they have acted like entrepreneurs.

B. Michael Palmer's "The Application of Psychological Testing to Entrepreneurial Potential"[2] is a thought piece rather than an empirical study. He takes up the problem of functional or ex post as opposed to ex ante identification of entrepreneurs. The author's concern is with the difficulties of measuring entrepreneurial potential which would be highly useful in order to help provide entrepreneurial talent to areas in need of economic development but which lack a pool of entrepreneurial individuals capable of taking advantage of opportunities in the environment.

After reviewing the literature regarding the definition and role of the entrepreneur, Palmer concludes that the use of attitudinal and motivational tests provides the opportunity to identify potential entrepreneurs. Furthermore, he singles out decision-making under conditions of uncertainty as the key variable in testing for entrepreneurial talent. Thus, the author concludes that some measure of an individual's perception of risk and his/her ability to handle that risk would be extremely useful insofar as being able to make an ex ante identification of potential entrepreneurs.

C. David C. McClelland's "Achievement Motivation Can Be Developed"[3] is an important article which makes an argument for the need for motivational training to accompany programs geared toward increasing the environmental opportunities of individuals and groups. In his view, there is little point in providing additional opportunities for those without the achievement motivation or need requisite for taking advantage of such opportunities. Abundant evidence has been gathered of the failure of programs which are intended to better the circumstances of individuals yet have neglected to develop the psychological characteristics necessary to successfully utilize the program.

The author takes the view that training in achievement motivation is possible and proposes the use of training programs in conjunction with the expansion of opportunities. McClelland suggests four elements to be included in such a program: goal setting; language of achievement; cognitive supports; group supports.

Having conducted a program of this type in India, McClelland observed a doubling of entrepreneurial activity. Thus, he concludes that it is not enough to merely improve the available opportunities for people. There must also be present the achievement motivation which will enable individuals to take advantage of those opportunities. Fortunately, at least if we are convinced by McClelland, motivation can be taught and developed in the individual regardless of age.

Dr. Marilyn Kourilsky, in a Journal of Creative Behavior article, "Predictors of Entrepreneurship in a Simulated Economy",[4] is also concerned with the ex ante identification of entrepreneurs. The author reviews the literature and points out that learning theory suggests that the cognitive element of the individual, i.e., ability to use information and education, is much more amenable to change than is the motivational element--an observation that challenges but does not refute McClelland's findings. During the course of her study utilizing the children in her Mini Society course, Kourilsky also concludes that risk-taking is not a good entrepreneurial indicator. This confronts Palmer's conclusion.

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What Kourilsky found through her study was that persistence was the most significant predictor of entrepreneurial success. Further results were that academic ability and initiative were the next two important indicators for boys while maturity and perception of success were those for girls. She then emphasizes the need for further research to determine whether the predictors of entrepreneurial success would be the same for adults, the point being that if it is possible to determine the relevant characteristics related to entrepreneurial behavior, it would then be possible to make a concerted effort to develop and enhance those at an early age, thus increasing the entrepreneurial talent pool in society.

To summarize the four articles, McClelland and Lachman view motivation as being the key indicator of entrepreneurial potential, Palmer suggests decision-making and risk handling as appropriate measures, and Kourilsky identifies persistence as most significant.

From these and other studies, a short list of entrepreneurial attributes can be derived.

1. need for achievement
2. creativity and initiative
3. risk-taking and setting of objectives
4. self-confidence and internal locus of control
5. need for independence and autonomy
6. motivation, energy, and commitment[5]
7. persistence.

Although no consensus has formed around one attribute being the most important, it seems all of these attributes can be developed or reinforced in an educational environment, and these attributes are not mutually exclusive (you can enhance one or more without diminishing or adversely affecting others). But how?

Review of Existing Programs

If we accept as an educational objective to increase entrepreneurial activities within our economy through use of curriculum materials which discover and develop entrepreneurial attributes, thereby increasing the pool of entrepreneurial talent, we must build a framework in which these curricula would reside. I will advocate that entrepreneurship education be part of economics education instruction. The child must be exposed to economic concepts that form a cognitive domain in which entrepreneurs and entrepreneurship can be developed. It is the economic environment in which the entrepreneur has relevance and, some would argue, critical importance.

One schema which one may propose is that there are five periods during which entrepreneurial attributes and skills can be developed:

1. preschool
2. grades K-7
   ] middle schools 6,7,8
3. grades 8-12
4. college
5. adult education.

Preschool--from birth to the child's entry into a formal educational system such as kindergarten. Parents are strong influence on personality development but increasing numbers of children are placed in day care facilities which will also influence the child's cognitive and personality development.

K-7--the elementary grades. During these years the child becomes more aware of family members as role models as well as being influenced by formal education. These formative years in which the child's personality is still flexible and receptive to new ideas, seem to be optimal for entrepreneurial attribute development. During the whole period the child could be exposed to economic and entrepreneurial concepts. Toward the end of the period and in the first years of high school (middle school years 6,7,8) the student could study the role of entrepreneurs in the economy and learn of entrepreneurial opportunities that exist within the economic and social structures).

Grades 8-12--continuing enhancement of attributes and further development of awareness of entrepreneurial opportunities but mainly focusing on skills necessary to plan, form and manage an entrepreneurial venture.

College--more formal and in-depth entrepreneurial, economics, and management courses. Knowledge is increased from work experience.

Adult--taking advantage of special instruction in business formation and management through national, state, and local networks like the Small Business Administration and its Small Business Development Centers and the local groups like SCORE--consultants who are retired business managers.

Throughout these periods, people will learn through their personal job experiences and by observing others like their parents, cohorts, and former associates. The focus of this paper, however, is #2 of the above schema, kindergarten through grade 7. If educators are to effectively incorporate entrepreneurship into the curriculum, it is necessary, first, to establish a justification for its inclusion and, second, to identify a vehicle or vehicles by which to do it. I would argue that the justification has been made above and can further be reinforced by the argument that economic education is appropriate at all grades and ages. Finally, if we accept the premise that entrepreneurship education is, in part, a subset of economics education (it might also be considered a partial subset of management education), then we must look at economics and entrepreneurship materials to see how broad and effective they are at the elementary level.

A. Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts, 2nd ed. New York: Joint Council on Economic Education, 1984, 71 pp.

The Framework is a classic document among economics educators which effectively identifies most of the key concepts that constitute economics and economic understanding. The Framework identifies entrepreneurs under productive resources (human capital) but fails to identify the role of entrepreneurs in generating new businesses and, consequently, economic growth. The Master Curriculum Guide is used, as its title suggests, as a framework for teaching basic economic concepts. Entrepreneurs and entrepreneurship are an integral aspect not only of economic theory but also economic practice. The omission of an important role for entrepreneurs and entrepreneurship in the Master Curriculum Guide leaves a gap in the framework which must be filled if entrepreneurship is to assume its appropriate place in economics education.

Calvin Kent, in a working paper entitled "What Economic Educators Should Teach About Entrepreneurship," identifies five essential economic understandings associated with entrepreneurship which should be emphasized (and in this case incorporated into) the economics curriculum:[6] 1) Entrepreneurship is a productive resource; 2) Entrepreneurship requires profits; 3) Entrepreneurship creates technological change; 4) Entrepreneurship generates jobs; 5) Entrepreneurship causes economic growth. Each leads from the identification of what an entrepreneur is and what roles and functions he/she plays within the economic processes. The Framework should incorporate the broader concept of the entrepreneur in its next edition and explain the five understandings that Kent has identified.

The Master Curriculum Guide does place emphasis on one critical function of the entrepreneur--decision making. It helps develop a decision-making grid and various quantitative tools for economic analysis. The materials for grades K-12 published by the Joint Council contain a wealth of useful, imaginative and effective strategies for teaching economics. The Framework and its associated strategies can build economic understanding of great benefit to producers, consumers and citizens, but it does not place sufficient emphasis on the various roles entrepreneurs play within economics.

The Framework is an important document because it identifies the key economic concepts. A logical extension of the Framework is a K-12 scope and sequence for economic education. The National Specialized Center for Learning Theory and Economic Education at Georgia State University published an Economic Education K-12 scope and sequence. Although the scope and sequence is the culmination of the efforts and views of teachers, professors, curriculum coordinators, and administrators, it reflects the Framework's outline of economic concepts. It, like the Framework, is deficient with respect to infusion of entrepreneurial concepts into the scope and sequence. It has no reference to the development of entrepreneurial attributes.

The deficiencies of the Framework and, it is hoped, future scope and sequences will be partially remedied by the Pew Foundation-supported curriculum development in entrepreneurship. These new curriculum materials are for the secondary grades, but they do incorporate many entrepreneurial concepts. These materials can serve as a point of departure for curriculum development in the elementary grades. None of these documents address the idea of entrepreneurial attribute development or enhancement. They implicitly assume that entrepreneurial talent is fixed and the task of the educator is to help these individuals identify entrepreneurial opportunities and train them to take advantage of these opportunities. This reflects a necessary but not sufficient condition for maximizing entrepreneurial behavior in the economy.

B. Mini Society: Experiencing Real-World Economics in the Elementary School Classroom, by Marilyn L. Kourilsky. Menlo Park, California: Addison-Wesley Publishing Company, 1983.

The Mini Society is perhaps the best of the strategies currently used in the lower grades in teaching economics and the characteristics of entrepreneurship. Kourilsky has demonstrated that not only does Mini Society effectively teach economics, but it also enhances reading and math skills. Mini Society is developed from the realization of scarcity - an economic problem. This reality forces the participants to grapple with many real world problems including decision making, innovation, imagination, dealing with failure, learning the dynamics of the marketplace and the importance of information and business skills. Participants must form and manage businesses within the economic system the students organize.

The Mini Society does foster learning of the basic economic concepts, principally through learning by doing. Experiencing the realities of doing business is a great teacher. Success motivates and failure forces adaptation, thought and increased efforts. Mini Society and its newer offshoot, Kinder-Economy, foster the characteristics entrepreneurs require. Perhaps best--it fosters those difficult-to-teach attributes of imagination and foresight. It reinforces the positive and helps build strategies for dealing with the negatives.

C. Case studies. The Georgia State University Center for Business and Economic Education.

Case studies provide the opportunity to substitute printed matter for personal visits or video presentations by or about entrepreneurs. The Georgia State University Center for Business and Economic Education has put together over the past five years a series of case studies for students at all grade levels including the elementary grades.

All of the elementary-level cases present basic economic concepts and create activities to reinforce those concepts. The cases generally help to develop decision making skills, basic concepts of entrepreneurship, markets, prices, supply and demand, competition, etc. Two struck me as providing something more--"Chick-fil-A" and "Keeping Up With the Jones's Kids: A Case Study of the Little People." In these cases the entrepreneurs--the founder of these two businesses - are presented in such a way as to emphasize a broad range of entrepreneurship skills--imagination, dealing with uncertainty, taking risks, changing the organization and management of the firm as economic conditions changed, and hard work over a long period of time. The presentations are a good blend of facts and exercises. The exercises are designed to permit a wide latitude of responses to questions and situations. There are no prescribed right or wrong answers or solutions, and there is room for individual responses which can be shared with everyone.

These two cases are clear demonstrations of how case studies can be effectively used for entrepreneurial education within economics education. "Chick-fil-A" was designed for grades two through five, while "The Little People" spans grades four through six.

D. "I Can Do It," The American Entrepreneur Series. San Mateo, California: National Federation of Independent Business.

"I Can Do It" is a series of three films or videos featuring three entrepreneurs. The story of these three entrepreneurs is a valuable aid for anyone teaching entrepreneurship. Each case is a unique and interesting presentation. In different ways, each conveys to the viewer (and learner) how each entrepreneur got started; the hard work required; the necessity for concern about sound business principles of management, finance, and marketing; the importance of the customer; the importance of teaching your children about the business and providing opportunities for development of employees' abilities. Each film provides positive reinforcement (you can do it). Yet it does so with the realism of meeting payrolls and sweating out decision outcomes.

The films feature a black male, a white female and male in very interesting businesses: printing, adventure travel guides, and an expanding dairy/food business. These presentations are visually appealing and, even more important, are educationally sound and a real resource for students in all but the lower grades. Packaged with a guide, these materials will find a positive reception by those teaching entrepreneurship. New videos need to be developed for grades K-4, particularly.

Audio-visual materials should highlight positive role models, focusing on personal attributes of the entrepreneur and encouraging student activities which reinforce the concepts taught and help the students identify with the entrepreneurs.

Where Do We Go from Here?

Children in elementary grades can learn economics. This has been researched and demonstrated.[7] Economics can be taught to young children by a number of methods.[8] The new challenge for economics educators is to introduce entrepreneurship education into the elementary grades while continuing to emphasize economic concepts. In the K-7 programs, the focus should be first on economic principles, then on the development and enhancement of entrepreneurial attributes. During the later elementary (or first middle) grades the entrepreneurship content should have students looking at the economy for entrepreneurial opportunities. This can be done by exploring new ways of doing old things or by examining new inventions, products, or services--while continuing to learn new economic concepts and enhancing entrepreneurship attributes. These objectives at the elementary level are part of a spiraling curriculum. Figure 1 shows where the emphasis in entrepreneurial education should be placed by grade level. At all grade levels, economics is being taught. The bold lettering reflects the focus of the entrepreneurship education.

Figure 1

School System

Grades K-5	Grades 6-8	Grades 9-12
ENTREPRENEURSHIP ATTRIBUTES	Economic Concepts	Economic Concepts
	Entrepreneurship Attributes	Entrepreneurship Attributes
Basic Economics	BUSINESS OPPORTUNITIES	Business Opportunities
		BUSINESS MANAGEMENT

Above, we listed the characteristics of entrepreneurs. Each characteristic described is desirable from the societal as well as the individual perspective. Certainly, curricula which help to develop these attributes will have positive outcomes. Creativity and inventiveness will apply equally to future inventors, scientists, and artists. Motivation, self confidence and persistence instilled in future members of the workforce will undoubtedly please employers and enhance efficiency and productivity.

What methods are already available or might be developed to accomplish this objective of entrepreneurial attribute development and enhancement? The Kinder Economy and Mini Society proved to be effective at teaching economic concepts, developing entrepreneurial attributes, and providing insights into business opportunities. These programs require blocks of time and teachers who have had training in the programs. They also require a supportive principal and teachers who understand the process as well as the learning outcomes.

Case studies also achieve multiple objectives: reading, decision making, recognition of role models, "insightfulness", and learning from past successes and failures. The cases should be drawn from the local business community so that young students have some familiarity with the product or service involved or recognize by name or reputation the individual business owners and operators.

A third set of materials needs to be developed. These are materials which are attribute-enhancing--brief units which stretch the students' minds, influence their personalities, challenge their creativity, and develop their problem solving and decision making skills. These materials might be based on the experiences that McClelland has had in increasing the N achievement factor in people. From a curriculum perspective, there might be less resistance to their use than, say, the Mini Society, because of the time factor. However, teachers will need training to use these materials if only to convince them of the desirability of their inclusion in the curriculum at all.

Another approach might be for school systems to have trained specialists (like the visiting art teacher or reading specialist) whose responsibility is to conduct attribute enhancement training. These special teachers could develop or adopt programming which could help develop entrepreneurial attributes without requiring large blocks of classroom time.

Economics education has been finding its way into the elementary curriculum. What needs to be done is to infuse the economics education process with entrepreneurship education and attribute development. To effectively do the latter requires additional research to serve as a foundation for new classroom materials. To teach those materials requires teachers with cognitive skills and imagination. In addition, the effort requires supportive administrators and parents. It will undoubtedly require that educators determine the opportunity costs of these actions.

American education is suffering from schizophrenia. Demands are for more structure, large numbers of tests, and lock step education. However, entrepreneurial education requires the antithesis: individual development, fewer "right" and "wrong" answers, and greater tolerance for deviations from norms.

Entrepreneurial children frequently come from entrepreneurial family environments. If schools are to reinforce or influence the development of entrepreneurs, then the environment must be more entrepreneurial. I'm not sure American education can meet this challenge, but it must try!

FOOTNOTES

1. Ron Lachman, "Toward Measurement of Entrepreneurial Tendencies," Management International Review 20, (1980), pp. 108-16.
2. M. Palmer, "The Application of Psychological Testing to Entrepreneurial Potential," California Management Review 13, No. 3 (1971): 32-8.
3. David McClelland, "Achievement Motivation Can Be Developed," Harvard Business Review 5 (No. 6, 1965).
4. Marilyn Kourilsky, "Predictors of Entrepreneurship in a Simulated Economy," Journal of Creative Behavior 14 (Third Quarter 1980): 175-98.
5. Yvon Gasse, "A Strategy for the Promotion and Identification of Potential Entrepreneurs at the Secondary School Level," Frontiers of Entrepreneurship Research, 1985, John A. Hornady, et al., eds., Center for Entrepreneurial Studies, Babson College, Wellesley, Mass.
6. Calvin Kent, "What Economic Educators Should Teach About Entrepreneurship," National Center for Entrepreneurship in Economic Education, Baylor University, pp. 12-13.
7. Kourilsky, "Children's Learning of Economics: The Imperative and the Hurdles, " Theory Into Practice 26 (Summer 1987): 198-205.
8. Beverly Armento, "Ideas for Teaching Economics Derived from Learning Theory," Theory Into Practice 26 (Summer 1987), pp. 176-182.

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Chapter Thirteen

INTEGRATING ENTREPRENEURSHIP IN THE SECONDARY CURRICULUM: ECONOMICS AND OTHER COURSES

By Calvin A. Kent

The purpose of this paper is to suggest where entrepreneurship can be appropriately integrated into the curriculum of the secondary schools. Entrepreneurship has become one of the clearly recognized trends sweeping not only this nation, but the world.[1] Recent years have seen a phenomenal growth at the college level in courses designed to teach the skills necessary for entrepreneuring.[2] In addition, entrepreneurship curriculums are beginning to appear designed to meet teaching objectives at the secondary level. Since the majority of high school students do not go on to college, if there is value in training for entrepreneurship the subject should be introduced in the high schools. How that can be accomplished is the topic of this paper.

What Is Entrepreneurship

It is necessary to understand what is being talked about when reference is made to entrepreneurship. Entrepreneurship is incorrectly equated only with starting a small business. While new venture creation is the most prevalent form of entrepreneurship, it is not the only form. To limit entrepreneurship to just new venture creation unnecessarily limits the scope of entrepreneurial activity. Entrepreneurship may be the result of a team effort in an existing organization such as a large corporation or even within a government bureaucracy.[3]

Also, there is a tendency to lump both entrepreneurs and managers together. While out of necessity entrepreneurs often manage their own enterprises, to equate entrepreneurship with management is misleading. The literature demonstrates that the essential difference between entrepreneurs and managers is perception.[4] Entrepreneurs do more than just combine the other factors of production. Entrepreneurs perceive a need in the marketplace for goods and services or for new technologies. Entrepreneurs are willing to act on these perceptions and in so doing, take a risk that either the new product or the new technology will succeed in the market. It is this quality of perception and action on the perception that distinguishes entrepreneurs from managers. Entrepreneurs should be considered a separate economic resource, whereas managers should be viewed as a specialized form of labor.

There is a lack of consensus among writers about entrepreneurship as to precisely what is meant by the term. Joseph Schumpeter equated entrepreneurship with innovation in the broadest possible sense of the term.[5] To him, innovation goes beyond discovery and includes implementation and/or commercialization. The entrepreneur sees an unexploited niche. By developing a new product, devising a new service, discovering a new technology or formulating a new organization the entrepreneur fills the niche. Invention is not innovation. Invention involves seeing the niche and developing a way to satisfy the perceived need. Innovation goes further requiring that the idea be actually implemented or at least tried in the market. This involves the taking of risk which the introduction of new ideas entails.

Edwin Harwood defines the characteristics of entrepreneurs as:[6]

1. Taking initiative
2. Assuming considerable autonomy in the organization of resources
3. Sharing of risks
4. Participating in uncertain rewards
5. Innovating in more than an incremental or marginal way

It may be more illuminating to follow Albro Martin's (1982) lead by delineating who are not entrepreneurs:[7]

1. Persons who would give only orders (they are managers)
2. Persons who risk only their capital (they are investors)
3. Persons who create in a literary, artistic or dramatic sense unless that creation is innovative and exploited for gain by their own efforts

It is easier to define entrepreneurship by its results than by its characteristics. There are five things that entrepreneurs do:

1. Introduce a new product or service in the market or implement a new approach to a social problem
2. Develop and implement a new technology which lowers costs and improves efficiency
3. Open a new market by introducing products, services or technology not previously available in that market
4. Discover a new source of supply for a scarce resource or methods of increasing the supply from existing resources by more efficient exploitation
5. Reorganize an existing enterprise, either private or public, by innovative management

Under these definitions entrepreneurship is much broader than just starting a new business. It can include innovative activities in large corporations, non-profit organizations and even government agencies or socialist enterprises. Programs in entrepreneurship education must recognize the full scope of entrepreneurial activity and not confine themselves to "how to start and manage a small business."

Dimensions of Entrepreneurship Education

In teaching the next generation of entrepreneurs it is important to note that entrepreneurship education has at least two broad dimensions. The first is awareness and the second is skills. Each of these can be broken down further. A program which focuses only on the skills entrepreneurs need to run a business omits vital understandings and will exclude those students who are not aware of the possibility that they could be entrepreneurs.

Awareness. Education for entrepreneurship awareness takes two forms. The first concerns the student becoming aware of the role entrepreneurs have, are and will play in society. It is important that as part of the process of education that students become aware of the importance of entrepreneurs in the growth and development of the American economy and the economies of other nations in the past, present and future.

It has been suggested that one of the reasons why the supply of potential entrepreneurs has been limited is because entrepreneurship is rarely portrayed in a favorable light.[8] While this problem may be less now than it was a few years ago, it is still fair to say the impression most students have of entrepreneurs is, to a degree, unfavorable. The caricature of entrepreneurs which prevails in both the media as well as in the curriculum materials students use in schools is not positive. Entrepreneurs are rarely portrayed as heroes. They are often viewed as villains, buffoons or both. When asked to identify entrepreneurs from the media, students almost invariably recall J.R. Ewing from the television show "Dallas"--hardly a desirable role model which students might wish to emulate.

Allowing the students to experience positive entrepreneurial role models, either by class contact or through curriculum materials, becomes the first step in entrepreneurship education and one which should begin well before the secondary grades. This can be accomplished either by in-class speakers, by viewing videos or by reading case studies. The direct approach of "elbow rubbing" is very effective. By far the best method is an internship which leads to a mentor relationship between the student and the entrepreneur.[9]

A second form of awareness is allowing the students to see that entrepreneurship may be a career possibility for them. It is a rare school where the career counselor has any idea of how to present entrepreneurship as a possible vocation. There are folders, films, and reference materials of all sorts regarding various trades and professions. But relatively little has been done in supplying vocational counselors with the materials that they need for students who might wish to explore the possibility of entrepreneurship. When materials sometimes do exist they may tend to overglorify the entrepreneur. The students need to understand that while there are rewards to the entrepreneurial life, entrepreneurs live with risk and constantly face the possibility of failure. While there are varieties of psychological tests which have been developed to determine the aptitude of students for various other occupations, no such battery has yet been forthcoming which does the same for venture initiators.

Skills. As was the case with awareness, the skills in entrepreneurship also consist of two components.[10] First are the technical insights that students must possess if they are to be successful entrepreneurs. While it should be obvious, it is worth reiterating, that successful entrepreneurs must possess a high degree of technical knowledge in the field of their entrepreneurial activity. It is unlikely that someone knowing

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nothing about auto mechanics will be successful if they open their own garage. The first prerequisite for entrepreneurship education is to make sure that students have the vocational skills necessary to successfully compete in the marketplace.

The second skills component covers certain managerial skills which entrepreneurs need to learn. While entrepreneurs often are poor managers, this does not need to be the case. Entrepreneurs must have the necessary financial management skills to at least understand the information arrayed before them by their accountant or banker as well as sufficient savvy to keep the necessary records for their own use and for tax purposes.

Entrepreneurs also need to understand that to be successful they must work with other people. Human relations does not seem to be a long suit of most entrepreneurs who often fail to understand the needs and wants of those with whom they are working. They may often become annoyed when their employees fail to share either their vision or their dedication. As is always the case, communication is the key to human relations and is a skill that most potential entrepreneurs need to acquire.

There is also another set of skills entrepreneurs must possess which are more introspective. There are psychological factors which separate entrepreneurs from others. Entrepreneurs are those individuals who possess a great deal of inner control. They recognize that their successes or failures are their responsibility and not something that can be attributed to others. They are self-starters who are goal oriented. As a result they view failure in a different context. They do not see failure as rejection, but as a building block which they may use as the foundation for their future success. The very word "entrepreneur" conjures up the idea of risk taking. Students with poor self-images are unlikely to take the risk that entrepreneurship requires. If they do, they may be devastated if the risk results in defeat. Since entrepreneurs possess these traits, some have questioned whether or not entrepreneurs can be taught these instincts and personal qualities or whether they are born with them. This is a question addressed in the latter part of this paper.

Entrepreneurship in Specific Courses

Where should entrepreneurship be introduced and taught in the high school curriculum? As could be suspected, there are several courses and levels at which entrepreneurship can be integrated. While a full unit on entrepreneurship could be taught as a self-standing, independent course of study, this is not the only approach, nor necessarily the most effective. Even if a free-standing entrepreneurship course is provided in the curriculum, its effectiveness will be enhanced if entrepreneurial insights are provided throughout the curriculum. If entrepreneurship education is isolated in a single course, it will be missed by many students who could profit from exposure.

Economics. The first course where the infusion of entrepreneurship should be is in the high school economics course. There are certain basic concepts regarding entrepreneurship which should be integrated into the economics curriculum if the economics students are not to have a partial and inaccurate idea of how market system functions and how the process of economic growth begins and is sustained.[11] Fundamental economic literacy is essential for entrepreneurs, but most economics curriculums today ignore the vital position of entrepreneurs in the economy.

There are four micro- and three macroeconomic concepts regarding entrepreneurship which should be included. First, in microeconomics, entrepreneurs should be presented as a factor of production. The students, when first being introduced to the scarce factors of production, should realize that entrepreneurship is a separate and distinct factor from labor, land and capital. In fact, entrepreneurs discover or create the other three factors as well as organizing them to turn those inputs into more highly valued outputs.

Second, students should know that entrepreneurs create disequilibrium. Traditional economics shows how markets move toward equilibrium reconciling the forces of supply and demand. Entrepreneurs create disequilibrium by the introduction of new products or processes into the marketplace and, thus, create entirely new markets while destroying old ones.[12] Entrepreneurs do more than respond to price signals. Entrepreneurs introduce these new products and technologies which create new demand curves when consumers become aware of the availability of new products. New technologies also effect costs and create entirely new relationships between price and the amount producers will supply.

The role of profits, a third microeconomic concept, needs to be more fully developed. While the desire to earn a profit is a motivating force for entrepreneurs, it is not the only one. Certainly the desire for autonomy and the need for achievement are equally as important, yet are rarely included in economists' models.[13] Traditional economic analysis views profits as a residual measuring the difference between costs and revenues. The sterile cost and revenue curves of most microeconomic chapters leave the students without a full understanding of the dynamics of the profit motive.

In addition, the absence or the presence of profit does not indicate whether entrepreneurship is taking place or not. Many successful ventures are not profitable during their formative years. In addition, the existence of profits may reflect nothing more than a monopoly position achieved by a firm rather than entrepreneurial innovation.

The final microeconomic concept is the role of entrepreneurs in innovation. Schumpeter saw innovation as what distinguished the entrepreneurs from others.[14] Entrepreneurs are constantly developing new ideas and new technologies and introducing them into the marketplace. It is a very useful insight for economics students to understand that the process of innovation is not mysterious. There is a person behind it who has the idea, perfects the idea and commercializes it, as well.

On the macroeconomic side, students first need to recognize the pivotal position of entrepreneurs in economic growth, both for the developed and the underdeveloped world. Entrepreneurs are the ones who provide the new technologies which improve the material welfare of humankind.[15] As these new technologies are developed and introduced, new jobs are created. This is not an unmixed blessing, as some jobs may be destroyed as old products and technologies are made obsolete. While it was often felt in the underdeveloped world that government would have to assume the role of the entrepreneur because there was not sufficient indigenous entrepreneurial talent, this idea has been demonstrated to be false by the recent explosion of entrepreneurial activity in the lesser developed lands.[16] Given both economic freedom and adequate incentives, entrepreneurship can be a universal phenomena propelling economic growth.

Second, students discussing macroeconomic policy should be aware that creating an environment conducive to entrepreneurship is an effective policy for job generation. The statistics show that new and growing ventures generate a disproportionately large amount of the jobs in the economy, particularly jobs at the entry level.[17] Traditional macroeconomic theory assumes that if aggregate demand and aggregate supply are appropriately manipulated by fiscal and monetary policy, investment opportunities will be created and jobs will be automatically forthcoming. A better understanding of the entrepreneurial process will show the obvious shortcomings in that approach.

Third, macroeconomic analysis focuses on the mechanical relationship between aggregate supply and demand. Variables which are subject to quantification such as interest rates and money supply receive attention. But as Keynes himself emphasized, behind all these relationships there are entrepreneurs who must make the decision to invest or not to invest.[18]Understanding entrepreneurs and entrepreneurial motivation should be included in the discussion of macroeconomic equilibrium.

Placing entrepreneurs in the pivotal position which is rightfully theirs in the study of economics would do much not only to improve student comprehension, but also enjoyment of their high school economics course.

Business Education. Perhaps the next most obvious place where entrepreneurship should be included is in the high school business education curriculum. This is the appropriate place for the financial and human management skills to be introduced, developed and practiced by potential entrepreneurs. The most appealing approach to business education is to have the students view themselves as employers rather than employees. In such a role the student then asks, "What is it that I want out of those who work for me? What sort of behaviors and attitudes would I find desirable?" This role reversal from how business education is often taught may be the most effective way of inculcating the necessary work virtues.

While there is some disagreement, most business education programs in entrepreneurship include twelve specific managerial skills which entrepreneurs need to possess that should be covered in the business education curriculum.[19] These include: 1) Selecting the form of business ownership; 2) Doing market research; 3) Locating the business; 4) Financing the business; 5) Identifying legal issues; 6) Complying with government regulation; 7) Acquiring skills in decision making; 8) Managing people; 9) Promoting the product; 10) Keeping business records; 11) Managing finances and credit; 12) Protecting the enterprise.

It is not necessary that students master each of these in the high school business course. What is essential is that prospective entrepreneurs recognize the need to develop these skills should they entrepreneur or that they will need to have on their entrepreneurial team either as employees or consultants those who do possess those skills. At a minimum, entrepreneurs must know enough to understand what their employees or consultants will be telling them.

Government. The action of government in creating and limiting the environment for entrepreneurship should be included in courses of high school government. Those portions of these courses that deal with government taxes and regulation should be careful to denote that these policies may not be neutral upon the entrepreneurial environment.[20] By reducing the rewards to entrepreneurial activity, taxes also reduce the likelihood of the entrepreneurial event.[21] Regulation is a burden to all businesses, but more especially to small entrepreneurial ones which generally have less ability to bear the costs of compliance.[22] Whole industries have been destroyed by government regulation while new industries have been created. It would be well if government students could identify "paper entrepreneurs," that new breed of business persons who makes profits for their firms, not by innovating new products or introducing new technologies, but by discovering the loopholes in the tax code and means to skate through the labyrinth of government regulations. [23]

Comparative studies should be undertaken about the role of entrepreneurs under alternative political structures. Why has there been a movement toward the free market in command societies? Is there a relationship between political and entrepreneurial liberty? To what extent is the existence of one type of liberty essential for the presence of the other? These are fundamental questions which students need to explore in the high school government course. Can government bureaucrats be made entrepreneurial? To what extent can privatization of governmental functions reduce costs and improve services by substituting entrepreneurial for bureaucratic provision?[24]

Psychology. The course in psychology is an excellent place for students to understand about the psychological characteristics of entrepreneurship and to determine if those characteristics describe them.[25] The high school psychology course which goes beyond description and has students evaluate their own personalities and motivations is a means of both identifying and motivating potential entrepreneurs. An answer to the question "can the psychological characteristics of entrepreneurs be taught?" can be addressed. A course which allows students to develop their own concepts of self-worth and inner control would be an outstanding addition to the process of entrepreneurship education. Psychology courses which are largely descriptive and theoretical will probably contribute little to the understanding of entrepreneurship or to the creation of the next generation of entrepreneurs.

Sociology. As with the case with courses in psychology, courses in sociology can also be important in the total entrepreneurship curriculum. The study of the sociology of entrepreneurship is in its infancy,[26]but there are several ideas that are consistent with the thrust in entrepreneurship education. Students should recognize that entrepreneurs both shape and are shaped by the culture in which they find themselves. Why do some ethnic groups seem to be more entrepreneurial than others? What is the impact of displacement (immigration, unemployment, divorce, etc.) on the tendency to entrepreneur? Is there a "culture" pertaining to entrepreneurship which can be developed or destroyed? Is entrepreneurship a way of integrating "outsiders" (minorities, women, etc.)? While current high school sociology courses generally do not raise these questions, paying attention to them would be profitable for students with an active or latent interest in entrepreneurship.

History. The importance of the entrepreneur as historical figures should not be overlooked. History teachers can do a great deal for expanding the horizons of their students by focusing on case studies of entrepreneurs who have contributed to the betterment of humankind at all times and in all places.[27] Case studies are particularly valuable if a variety of alternative stories are included which allow the students to relate to entrepreneurs of the same race and gender.

When history courses inaccurately portray entrepreneurs as "robber barons."[28] It is unlikely that students will view entrepreneurship as a desirable vocation. History courses often focus upon politicians and generals and their contributions. Entrepreneurial history is equally as important for students to understand their heritage. Those "mega innovations" which forever changed the course and direction of history should be included with emphasis upon those individuals who introduced them and the struggle that their entrepreneurial effort involved. To understand who we are and how we got to where we are, the students must comprehend the role of the entrepreneur. History can contribute to entrepreneurial alertness allowing students to see how niches were found in the past, so they may be better equipped to find their own niches in the future.

One last contribution which the study of entrepreneurial history can make is to allow students to understand that most progress is made through small steps. While the "mega innovations" are important, progress really happens as ideas are adapted and refined. The cumulative process of improving and changing old ideas in an incremental way to better satisfy consumer or producer needs is the form most entrepreneurial activity takes. The evolution of new processes and technologies is an essential ingredient in entrepreneurial history.

Science. Entrepreneurship can also be a thread woven into the fabric of science courses. Since technological advance often begins with scientific insight and continues because of entrepreneurial persistence,[29] students should understand the relation between scientific discovery and entrepreneurship. Many of the great scientists were also entrepreneurs who not only invented, but innovated in the most complete sense of the word of bringing their product or technology into the marketplace Edison was not only a scientist, but he was an entrepreneur who demonstrated how science can be commercialized and brought from the laboratory to the marketplace.

The computer industry is filled with stories of entrepreneurs whose ideas they both developed and commercialized. Learning these stories may be as important as studying the scientific rules, theorems and laws. The scientific genius who is a potential inventor may receive additional inspiration and motivation by understanding the relationship between science and the process of entrepreneurship. Science students need to know that having a good idea is not enough unless the process is completed by bringing that idea to the market and having it accepted.

Those who design secondary curriculum should make sure that entrepreneurship is not neglected. As this paper has demonstrated, entrepreneurship is neither a separate, nor an alien concept, but one which can enrich the students' understanding of a variety of secondary subjects. At the same time there is a societal benefit. As knowledge about entrepreneurship is more widely dispersed throughout the high school curriculum, the likelihood of individuals becoming entrepreneurs is enhanced and the benefits to the economy from expanded entrepreneurial activity insured.

FOOTNOTES

1. Martin Brinks and John Coyne, The Birth of Enterprise (London: Institute for Economic Affairs, 1983); see also Robert Heilbroner, The Worldly Philosophers, 6th ed. (New York: Simon & Schuster, 1986); see also Calvin Kent, "The Rediscovery of the Entrepreneur," in C. A. Kent, ed., The Environment for Entrepreneurship, (Lexington, MA: Lexington Books, 1984).
2. United States Small Business Administration, National Survey of Entrepreneurial Education, Vol. 1-6, 3rd ed. (Washington, DC: G. P. O., 1986).
3. Hans Schollhammer, "Internal Corporate Entrepreneurship," in C. A. Kent, et al., eds., The Encyclopedia of Entrepreneurship, (Englewood Cliffs, NJ: Prentice-Hall, 1982); see also John Naisbitt, Reinventing the Corporation (New York: McGraw-Hill, 1985); and Peter Drucker, Innovation and Entrepreneurship, (New York: Harper & Row, 1984).
4. I.M. Kirzner, "Entrepreneurship and the Future of Capitalism," in J. Bachman, ed., Entrepreneurship and the Outlook for America (New York: The Free Press, 1983).
5. Joseph Schumpeter, The Theory of Economic Development (London: Transaction Books, 1979). Originally published 1934.
6. Edwin Harwood,"The Sociology of Entrepreneurship," in Kent, et al, Encyclopedia of Entrepreneurship.
7. Albro Martin, "Additional Aspects of Entrepreneurial History," in Kent, et al., Encyclopedia of Entrepreneurship.

8. Thomas B. DiBacco, Made in the U.S.A.: A History of American Business (New York: Harper & Row, 1987).

9. Margaret Murphy, "Interns and Mentorships in Entrepreneurship Education Programs, paper delivered at the conference on Entrepreneurship/Economic Education, Widener University, March 11, 1988.

10. Thomas Scanlon, et al., "Entrepreneurship Education," Department of Adult Vocational and Technical Education, Illinois State Board of Education, Springfield, IL, 1980.

11. Calvin Kent, "Entrepreneurship as a Concept in Collegiate Principles of Economics Texts," Journal of Economic Education (Spring 1989), forthcoming.

12. William Baumol, "Entrepreneurship in Economic Theory," American Economic Review (May 1968).

13. Robert Brockhaus,Sr., "The Psychology of the Entrepreneur," in C. A. Kent, et al., eds., The Encyclopedia of Entrepreneurship (Englewood Cliffs, NJ: Prentice-Hall, 1982).

14. See Schumpeter, The Theory of Economic Development.

15. Arthur Seldon, Prime Mover of Progress: The Entrepreneurs in Capitalism and Socialism (London: The Institute for Economic Affairs, 1980).

16. P.T. Bauer, Equality: The Third World and Economic Delusion (Cambridge, MA: Harvard Univ. Press, 1981).

17. United States Small Business Administration, The State of Small Business: A Report of the President, Washington, DC: G. P. O., 1983.

18. J.M. Keynes, The General Theory of Employment, Interest and Money (New York: Harcourt, Brace, 1936).

19. Catherine M. Ashmore and Sandra G. Pritz, "Program for Acquired Competency in Entrepreneurship" (P.A.C.E.), revised ed., The National Center for Research and Vocational Education, Ohio State University, 1983.

20. Karl Vesper, Entrepreneurship and National Policy (Chicago: Heller Institute for Small Business, 1983).

21. Hans Stoll and James Walter, Tax Incentives for Small Business (Chicago: Heller Small Business Institute, 1980); see also Kent "Taxation and the Entrepreneurial Environment," in Kent,Environment for Entrepreneurship.

22. Kenneth Chilton, "Regulation in the Entrepreneurial Environment," in Kent, Environment for Entrepreneurship.

23. Robert Reich, "Pie Slicers vs. Pie Enlargers," The Washington Monthly, September 1980); see also Jonathan Hughes, "Entrepreneurship," in The Encyclopedia of American Economic History, G. Porter, ed. (New York, NY: Charles Scribner & Sons, 1980).

24. Calvin Kent, Entrepreneurship and the Privatizing of Government (New York: Quorum Books, 1986).

25. Brockhaus, "Psychology of the Entrepreneur."

26.Albert Shapero and Lisa Sokol, "The Social Dimensions of Entrepreneurship," in Kent, et. al., eds., The Encyclopedia of Entrepreneurship; see also Edwin Harwood, "The Sociology of Entrepreneurship."

27. DiBacco, Made in the U.S.A.

28. Burton Folson, Entrepreneurs vs. The State, (Reston, VA: Young America's Foundation, 1987).

29. Michael Martin, Managing Technological Innovation in Entrepreneurship (Reston, VA: Reston Pub., 1984).

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Chapter Fourteen

THE TEACHING OF ENTREPRENEURSHIP TO DISADVANTAGED YOUTH

By Steve Mariotti

Problems and Opportunities

A great problem in our country is that many of the inner cities have become unlivable because of youth violence and crime. Studies indicate that delinquency in teenagers is inversely correlated to their ability to find employment; nearly one-third of all violent crime is committed by disadvantaged youth between the ages of 16 and 24, many of whom are unemployed. Unfortunately, many youth are unemployed because of a lack of proper business training.

The problem is particularly intense in the case of disadvantaged and minority children. Noteworthy is the fact that almost 50% of minority youth in New York City never completed high school. I would like to suggest that this and many of the other problems of the inner city can be alleviated and possibly even solved by business education with an emphasis on teaching the craft of entrepreneurship to the disadvantaged. I have taught business education in some of our country's most intense ghettos including Spanish Harlem, the South Bronx, Bedford-Stuyvesant and East New York. It has been my hope that my work will help break the cycle of psychological poverty by giving disadvantaged students a head start in the business world. Through the teaching of entrepreneurial skills, my class can provide students with an alternative to welfare, crime and poverty and an antidote to their belief in the value of a large and coercive government.

There have been over 260 studies of how to improve our nation's public school system. Yet to my knowledge none of them has even dealt with the issue of teaching business or entrepreneurship at the high school, junior high, or elementary level. Making every child entrepreneurially "literate" should be the goal of every school.

Problems in Introducing Entrepreneurship into the High School

First, many school administrators and even business educators themselves lack a basic knowledge of the field of entrepreneurship. Although unquestionably many are dedicated and talented educators, their view of business education at the high school level is often limited to the teaching of traditional skills such as typing and bookkeeping. Almost without exception, their idea of employment centers on working for someone else.

Clearly, office skills are vital, but it can be argued that teaching students only secretarial skills is to condemn them to a life of low-payment, clerical jobs. To make matters worse, public school business teachers appear to be the only members of the high school faculty sympathetic to markets and the role the business community plays in economic growth and political freedom.

Second, certain psychological obstacles must be confronted. Teaching the art of starting a business is comparable to the teaching of computer skills ten years ago. Many educators are intimidated by new skills required. In the past decade, many public schools have become competent in the teaching of computer literacy. This clearly reveals that once the school system is mobilized, it can learn new skills in a very short period of time.

Benefit of Entrepreneurial Education

A significant benefit of teaching entrepreneurship in the ghettos and at the pre-college level is that it rekindles the indifferent and troubled student's interest in school. I have discovered, again and again, that my lessons on entrepreneurship appeal strongly to those students viewed by other teachers as undisciplined and low achievers.

In regard to ghetto teaching, the benefits are particularly great. Instead of there being a significant percentage of unemployed young people, a situation could evolve in which, over time many unemployed disadvantaged people could reverse self-defeating life patterns and become self-employed entrepreneurs. At first glance, it might seem that the greatest benefit would be in the sphere of pure economics, as entrepreneurship is a major way of revitalizing the inner cities. However, over the long term, the biggest gain will be to enhance individual self-esteem.

Many of the problems of the ghetto can be traced to the negative self-image of its inhabitants, which, in turn, derives from unemployment and a belief in an omnipotent domineering government. I, and many other researchers on this topic, believe that few things can improve the economic situation in cities more than bringing economic control (through entrepreneurship training) into the hands of the people who live in them.

Another and perhaps even more critical locale for the utilization of business education is within the jail system--a system which justifiably may be called the most complete ghetto of all. There are about 663,000 prison inmates across the country, almost as many people as live in San Francisco. If even a portion of these criminals would be rehabilitated through learning how to start, finance and manage a business, the benefits would be far-reaching.

Success is possible. It is my view that troubled students, prisoners, economically disadvantaged people and oppressed, demoralized communities can truly be revitalized in a short period of time. What is lacking in the ghetto is a fundamental knowledge of how to create wealth. If good business teachers can be trained and supportive infrastructure established within these communities, the rest may take care of itself.

Teaching Entrepreneurship to Disadvantaged Youth

I have developed special techniques for teaching disadvantaged and minority students basic business skills and concepts. The goal of my lessons is to break the cycle of poverty through the teaching of fundamental skills and attitudes necessary for the creation of wealth through successful entrepreneurship. Believing that people learn best by doing, I give my business students the following "real life" assignments during the course of the term:

Venture Capital. A major reason for the economic stagnation in disadvantaged neighborhoods is the lack of knowledge about the development of a business idea and how it is funded. Therefore, a major requirement is the writing of a business plan to be presented in class. Following this, students are required to contact one Minority Small Business Investment Company (MESBIC) by telephone or letter. At the beginning of the term none of my students has had any familiarity with these fundamental procedures or with the concept of venture capital.

Sales. I require my students to make one sales pitch to someone and pretend, through role playing, that they are selling a product. Most of my students live in depressed neighborhoods where business activity is limited and where exposure to salesmen and sophisticated marketing concepts may be minimal or nonexistent.

None of my students has ever made a sales call, but, interestingly, most all of them have had experiences with drug salesmen and pimps. By teaching lessons on the craft of salesmanship, I hope not only to increase my students' sales abilities, but also to raise their awareness of how to resist the sales pitches of the drug pusher.

Writing. Since writing skills are essential to successful entrepreneurship, my students are required to write one memo a week--18 in total--on an assigned business or economic topic. (Not one of my students had ever written a memo before.) In addition, each student must write one business plan as well as numerous business letters.

Marketing. I require my students to develop ads for their favorite companies and write a letter/ proposal to the company describing the ad and recommending its use. This project works well, since my students receive responses which they treasure. It also raises their awareness of marketing techniques. This is very important as there are few stores in their neighborhoods and, consequently, most students are not educated consumers.

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Self-Confidence. A significant problem in low-income communities is the negative self-image of many of its inhabitants. I attack this problem by having my students achieve small victories on a regular basis. I encourage them to give regular classroom presentations on accounting and financial topics. Undeniably, the ability to present oneself in a poised manner and to speak accurately is a valuable asset. However, a significant percentage of my students have never spoken before a group of people before. I also teach the enormous benefits of a positive mental attitude. Drawing on the works of Napoleon Hill and Clement Stone, I instruct students in the powers of positive thought and disciplined thinking.

Paperwork and Financial Reporting. For practice, I have my students fill out forms necessary for starting a business in New York. When teaching accounting principles, I do so as though I'm teaching a sole proprietor how to keep his own books. Each student is required to develop the three major financial statements used by an entrepreneur; the Income Statement, the Balance Sheet, and the Cash Flow Statement.

Taxes. My students fill out tax forms 1040 and the schedule C forms which are the minimum requirements for operating a sole proprietorship. This is a rare experience for the majority of my students, since many of their families are on welfare and thus unaware of the benefit of a balanced budget. The students, and their families as well, are often unaware of why a limited, fair and productive tax system is necessary for maintaining a well-functioning, democratic government.

Set Aside Programs. Any government contract over $100 million must provide for 10 percent participation of minority firms. I require my students to fill out the necessary forms to gain their (8a) minority status at the federal, state and local levels.

Research. One of the most difficult aspects of business is the research and collection of basic business information. Each term, I require my students to do research on the distribution techniques of the business they have chosen. This is a difficult task, even for an experienced businessman. I give each student a number of a major distributor for the product they have selected in their business plans. Only one call is required, but my students often generate substantial information from this event.

The Telephone Call. The inability to use the phone effectively is one of the major obstacles for people without financial capital. Accordingly, I require my students to use the phone regularly. Each student is assigned a research assignment which is impossible to complete without making a phone call. For example, I assigned one student to do research on New York City's policy of homesteading. The student made over ten calls for this project and then wrote a three-page typed report.

Visualization and Playing Using Video. I require each student to mentally visualize himself performing business functions. Then each student writes a video script based on his visualization. After the script is developed, the class utilizes video to capture the moments on film.

Analysis of Voice and Sounds. Several times each month, I bring a tape recorder into the room. Students practice their speaking abilities through a wide variety of methods involving playacting. At the end of the tape, students examine their tapes and this experience proves helpful in teaching proper grammar and speaking skills.

Guest Speakers. Twice a month I bring a guest speaker into my classes. This gives my students an opportunity to meet real entrepreneurs, managers, politicians and artists. These speaking events have gone well and our speakers have included Arthur Lipper, the owner of Venture magazine, and Gary Waldron, the owner of Glie Farms, one of the most successful businesses in the South Bronx.

Contracts. The enforcement of valid contracts is essential for economic growth. Often, would-be entrepreneurs in disadvantaged neighborhoods lack knowledge of basic contract law, are without the legal mechanisms to enforce them and are operating in cultures that often do not provide intellectual support for the enforcement of contracts. I require each of my students to draw up a two-page contract between himself and me. The contract outlines our relationship and, after examination and subsequent negotiation on my part, the contract is signed and witnessed. Both the student and I often refer to the contract during the course of the term to solve disputes.

Dealing with and Coping with Problems and Obstacles. The ability to identify problems and obstacles and develop a plan to overcome them is essential to success, but particularly in the risky and uncertain world of entrepreneurship. At the beginning of every term, I require my students to list their top ten problems, write a description of them and develop a plan for trying to overcome each of them. This is an effective assignment. For many of my students, it is the first time they have ever confronted their major problems.

Opportunities in Teaching Entrepreneurship to Disadvantaged Youths

One of the reasons for the success of courses on entrepreneurship is that there are special skills and innate qualities that seem to be characteristic of many inner-city youth--characteristics that were strongly elicited by the course. Among these innate qualities which can be brought to fruition are: independence, resilience, resourcefulness, and mental/emotional strength. Below are brief discussions of these qualities, derived from my teaching experiences:

1. Mental/Emotional Strength, Resourcefulness, Independence, Resilience. It is true that "every adversity has the seed of an equivalent or greater benefit." Children who are born to poverty generally develop certain compensatory skills. They often exhibit a high degree of the qualities mentioned above.

2. Challenging Life Experiences. The pain of poverty often enables a person to grow, both emotionally and intellectually, in ways that might not otherwise be possible. One of the hopes of entrepreneurial education is that it can assist students in closely examining their lives for lessons applicable to their future, help them set both short-term and long-term goals, and assist them in realizing their potential.

3. Natural Entrepreneurial Ability. Many of the skills essential to entrepreneurship--i.e., a willingness to take risks, assertiveness, persistence, and the kind of outgoing personality so helpful in salesmanship--can be traced to the necessity to be self-reliant at an early age that is often associated with growing up in an atmosphere of poverty.

Far-reaching Implications of Entrepreneurial Education

It is difficult to imagine anyone who is either his own boss or possesses the knowledge of how to start a new business (i.e., how to become self-employed) becoming prey to or engaging in totalitarian or coercive political activity. Evidence reveals that the backbone of any free society is the entrepreneur. To support such an assertion, one can cite the case of Jefferson and of other founding fathers who were self-employed for most of their adult lives.

The rapidly declining ability of world bureaucracies to provide adequate employment points to one of the major rationales for the widespread utilization of entrepreneurial education. Between 1970 and 1980, new companies provided approximately 20 million new jobs in America. In marked contrast, from 1977 to 1980 Fortune 500 companies lost 3 million jobs. If present employment trends continue, a significant portion of our country's and possibly the world population, may someday be forced to seek self-employment. Thus entrepreneurial skills are essential.

Even large bureaucracies can be revitalized as entrepreneurial knowledge spreads. Many of the qualities that make a good entrepreneur--particularly alertness to new information, and initiative--apply to any job or profession within a small, private enterprise or a vast corporation.

Finally, entrepreneurship, both because of its deep impact on individual consciousness and on the lives of urban communities, holds tremendous potential for counteracting the ideological tensions in the world at large. A possible counterforce to worldwide presence of Marxist-Leninism and the endless conflicts between nations and ethnic/religious groups may lie in the teaching of the craft of entrepreneurship.

Historically, entrepreneurial education has seldom existed. Those who succeeded in this sphere were primarily self-educated, operating outside of the realm of established modus operandi. It is significant to note that William Durant, Henry Ford, Andrew Carnegie, Clement Stone, William Lear, and Daniel Ludwig were all high school dropouts whose visions could not become materialized within any existing academic structure.

This is the age of the entrepreneur. A vital first step in compensating for the present lack of education in this area might be the introduction of entrepreneurial workshops into the curricula of all primary and secondary schools in the United States. Those who have attained a level of maturity and success in their own entrepreneurial ventures can--and must--nurture those just beginning the challenging and socially invaluable adventure into entrepreneurship.

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Chapter Fifteen

THE PAST, PRESENT AND FUTURE IN TEACHER EDUCATION: ECONOMIC EDUCATION AS A MODEL

By James B. O'Neill

The future implications for education at both the elementary and secondary level range, depending on one's assessment of the teaching profession, from beyond repair, to some slight hope for improvement. The decade of the sixties began with great optimism and the federal government responded by directing additional resources to education, only later to find it plagued by political turmoil and unrest. As a result, resources directed to content training several decades earlier (an input highly correlated with student learning) were reduced significantly.

In the early sixties, one area of focus of the federal government in improving education was enrichment programs in content areas (i.e., math, science, economics). However, graduate programs for experienced educators sponsored by the Office of Education and the National Science Foundation (which offered great promise in the early seventies) gradually withered away as budget cuts were made by a nation with changing priorities. The objective of this paper is to discuss a model program designed to improve education by utilizing the best teachers in the profession by having them trained in the subject content area and teaching strategies. Many questions can be raised about the failures of the past; however, the more important question should be: How can we, as a nation, develop a program that will retain our better and more creative teachers, along with attracting some of the future talent that will be graduating from our nation's universities? The theme of this paper will focus on retraining experienced teachers using a masters degree in economic education as a model.

Past Programs

The late '60s provided a variety of opportunities for professional growth for the experienced teacher. A number of summer institutes were offered in the sciences, social sciences, and humanities. Generally, these programs were 4-6 weeks in length, and the teachers were offered stipends to help cover their foregone opportunities while attending classes. These institutes, generally, had limited long-run benefits because of the lack of provision to implement their newly acquired skills once the teachers returned to their respective school districts.

Other alternatives open to teachers were the fellowship programs sponsored by both the Office of Education and the National Science Foundation. Generally these programs were summer programs or year-long in length and teachers were either recruited nationally or from a specific region. Tuition for graduate credit was provided along with a stipend and an additional financial allotment based on the number of dependents. As a result, some participants with large allotments were able to reduce their opportunity costs to zero in the pursuance of an advanced degree. Although the benefits that were derived from these programs are difficult to measure, certainly the potential offered by the federal government's investment in human capital was never reached because of the lack of reinforcement (at the local level) once the individual returned to his/her school district.

Although many programs were in the math and science areas, some of these early vintage teacher training programs focused on economic content. During this same time period of early involvement by the federal government, the Joint Council on Economic Education (JCEE) was beginning to increase its teacher training activities. Some of the earlier federally funded programs were directed by faculty members associated with the JCEE network and affiliated with Centers for Economic Education. The Centers were usually associated with the Economics Department and performed the teacher training function.

The focus of these early summer workshops was generally around the principles of economics with some movement toward curriculum application. Often workshops were taught by economics professors who were competent in their field, but had little appreciation of the needs of the K-12 teacher. The "what to teach" dilemma was faced by many of the early teacher trainers. This question led to the JCEE developing the first publication to give structural direction to economic education in grades K-12. Outlined in the Report of the National Task Force on Economic Education was the need for more and improved economic education in the schools and increased direction regarding the concepts to be emphasized at the elementary and secondary levels. As the economic education movement grew and new state councils developed, followed by new Centers for Economic Education, this report was an important frame of reference in many of the teacher training workshops.

The 1970s provided a time for additional material development along with the necessary teacher training. By the mid-1970s, persistent efforts of economists, specialists in economic education (economic educators), and teachers who clarified which economic concepts should be taught and how to teach them most effectively produced a consensus about what could be accomplished and how it should be done. These concepts include: 1) Understanding of basic economic concepts is more important than a heavy dose of factual knowledge; 2) Instructional efforts should concentrate on aiding students to achieve a fundamental understanding of a limited set of economic concepts and their interrelationships; 3) Students should be given a conceptual framework to help them organize their understanding of economics, and they should be exposed to a manner of thinking that emphasizes systematic, objective analysis; 4) The real personal and social advantages of economic understanding become apparent as individuals achieve competence in applying their knowledge to a wide range of economic issues they themselves confront.[1]

The Centers for Economic Education have evolved into the necessary link for providing effective economic education programs. Centers may be housed in either the College of Education or Department of Economics. More important than the location is the level of commitment by the cooperating institution. To meet the goals of establishing an effective teacher training program, the director should have a minimum of 50 percent released time to administer the Center.

Many Centers for Economic Education trained a number of elementary and secondary teachers who now have a basic understanding of the economic content. Once teachers were motivated, the next logical step for long-run impact was reinforcement. However, an active center with numerous program offerings for the local teacher population found that the number of teacher contacts became overwhelming. Therefore, growing Centers, even Center Directors with released time, began to experience a human capital shortage. The Centers had the capability to offer additional programs but were unable to provide maintenance to past workshop participants.

This human capital void for training reinforcement was the underlying rationale for developing graduate programs in economic education for master teachers. The University of Delaware's Masters of Instruction in Economic Education was developed as a model program in 1981 to train educators who would be recruited nationally.

Delaware Program

One of the primary objectives of the Delaware program is to alleviate the severe shortage of teachers who can teach economics at elementary and secondary school levels and who have the skills to assist in training other experienced teachers. Although the JCEE has been working to expand the number of school districts which have effective K-12 economic education programs, significant work must be done to have a capable teaching staff to reach most of the students in the district. The University of Delaware program is designed to train teachers to assist with the follow-up activities that are necessary for long-run behavioral change with teachers.

Presently, this is the only program recruiting teachers on a nationwide basis and providing them with the graduate-level instruction needed for them to become skilled economic educators. Most importantly, the graduates are trained to take their skills and provide additional training to teachers in their geographic locations to enable economic education to become a more viable part of the school curriculum.

The Delaware program's key elements are as follows:

Recruitment. A copy of the M.I. brochure (appendix) is sent to each Council and Center Director in the JCEE network. Candidates are nominated by their local council or center and then, after faculty review, 20 applicants are accepted into the program. This process proves to be an effective preliminary screening of potential candidates by having center/council directors choose people they want to have work with their centers/councils.

Since the beginning of the program in 1981, 82 teachers representing 26 states have participated. Each participant is expected to work with his local school district and cooperating Center to both establish and strengthen economic education programs.

Curriculum. The program is divided into two summer sessions and an implementation phase during the intervening academic year. The first summer session provides candidates with a thorough understanding of basic economic principles. In addition to economic theory, participants take courses introducing them to the most recent teaching strategies.

These strategies include curriculum materials published by a variety of commercial publishers, money and banking activities, K-12 curriculum materials published by the JCEE, and the Mini-Society, an experienced-based curriculum, developed by Marilyn Kourilsky. In addition to being periodically tested on their understanding of economic content, the class is divided into groups to present exemplary workshops. These workshops are videotaped for critical review and analysis after each presentation.

During the intervening school year, each degree candidate is required to work in conjunction with his/her cooperating school district and center to design an economic education program that reaches a broader base of teachers. These plans are reviewed and several on-site visits are made by the director during the academic year.

During the second summer session, the participants continue their studies with appropriate curriculum materials along with more advanced courses. These courses included: micro and macro theory; international trade; and money and banking. One aspect of the final grade is for each candidate to present a more advanced workshop, including strategies ranging from recruitment to evaluation.

Following the second summer, the participants again return to their respective areas to continue their on-site activities. The master teachers are also required to develop a public policy paper, applying economic principles to some area of interest and concern to them. A sample of covered topics include: comparable worth, economic impact of illegal aliens, third world debt, and application to free agent draft in professional sports.

Evaluation of the Program. The program has gone through a continual evaluation process from its inception. The first two programs were systematically evaluated by William Walstad who reported:

> In short, the MI degree program at the University of Delaware is an excellent example of a professional-training program that is achieving its major goals and objectives. The MI program is providing good instruction and is supplying the needed human capital for improved economic education in school districts across the nation. The program should have a significant impact on the field of economic education as the alumni make their contribution over the years.[2]

Impact of Program Graduates. The number of graduates continuing their involvement in economic education is most impressive. Over 70 of the 82 graduates (approximately 85 percent) have maintained a high profile in their local area's economic education program. Their activities in working toward curriculum improvement include: 1) recruitment and instructional assistance with summer programs; 2) teaching courses at the college level; 3) developing and publishing curriculum projects (several received national awards); 4) participation in district, county and statewide curriculum evaluation projects; 5) working part or full time with their state council for economic education (ten graduates).

Implications for Education in General

The primary objective of the MIEE degree program is to train the teachers in both content and curriculum strategies to enable them to be effective professionals in their region. They are expected to work in cooperation with their Center for Economic Education and their school district. To expect them to be change agents may be pushing the expectation level too high; however, the goal of the program is to maintain a high level of professionalism and to effect the quality and quantity of economic education taught in the school system. To borrow from a recent thought-provoking book on education, Winning the Brain Race:

> What might be done to improve teacher education, both its reputation and its effectiveness? The single most important thing would be to bring it into line with the preparation of other professionals.
>
> First-class professional training throughout the world has two elements: deep grounding in the content of the discipline--knowledge of law, or medicine, or architecture, for example; and hands-on experience and practice under the direct guidance of a master--the medical internship and residency is the most appropriate to teaching. . . . The role of the master is both to impart information and to communicate a style--a way of approaching problems, a way of thinking about issues.[3]

The paper has attempted to raise questions about some of the past failures of teacher training. The Masters of Instruction Program in Economic Education in Delaware can serve as a model to illustrate what can be done through economic education. This program has proven to be cost-effective and illustrates how effective change can be initiated with a minimum outlay of resources from the schools. Ultimately, the question raised earlier in the paper should be addressed: How can we, as a nation, develop a program that will retain our best and most creative teachers?

FOOTNOTES

1. P. Saunders, G.I. Bach, J. Calderwood, W.L. Hansen, A Framework for Teaching the Basic Concepts, 2nd ed., JCEE, N.Y., 1982.
2. William Walstad, Unpublished Evaluation, M.I.E.E. Program, 1985.
3. D.T. Kearns, D.P. Doyle, Winning the Brain Race, Institute for Contemporary Studies, San Francisco 1988, page 6.

James O'Neill is Professor of Economics at the University of Delaware and Director of the Center for Economic Education.

University of Delaware Graduate Program
Master of Instruction in

Economics Education

The Center for Economic Education at the University of Delaware announces a graduate program for educators to earn a Master of Instruction degree in Economics Education.

The purpose

- To strengthen the economics content of social studies instruction at the primary and secondary school level.
- To explore methods of providing greater opportunity for interdisciplinary work in the social sciences.
- To develop meaningful economics education programs across the nation and establish a network of educators who can help council and center directors instruct teachers in effective methods of teaching economics in elementary and secondary schools.

Who is eligible?

The program is open to educators who:

- Meet admission requirements of the Office of Graduate Studies of the University of Delaware. Official transcripts of all undergraduate work are required for admission to this area of concentration.
- Have completed a minimum of three (3) semester hours in economics.
- Hold a current teaching certificate and have a minimum of three (3) years experience.
- Are nominated by a Council or Center Director in their geographic region.

Application procedure

Candidates should complete the following procedures for admission:

1. Return completed application forms. In addition, include a statement defining your professional goals and describe how these goals may be achieved through a Master of Instruction program of study.
2. Submit letters of recommendation from your principal, supervisor, or professional colleagues, indicating their appraisal of your teaching effectiveness, your potential for professional growth and your ability to succeed in a graduate program.
3. Obtain a recommendation from the Center for Economic Education in your region.

Application materials must be received by April 15, 1987. Awards will be announced by May 1, 1987.

Financial aid

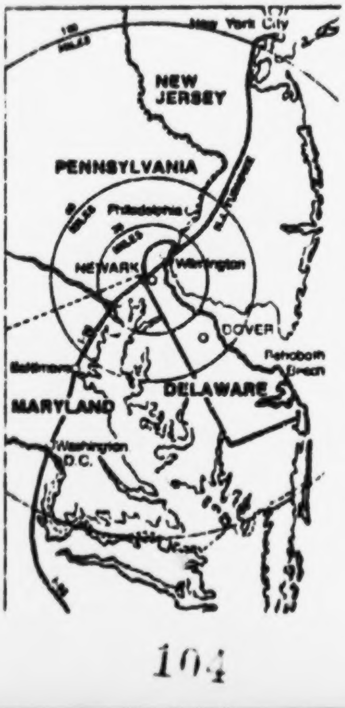
In addition to a full tuition scholarship for each summer session, participants will receive a stipend of $100 per week for room and board expenses. All participants beyond a 200 mile radius will be eligible for a travel allowance of up to $300 each summer, based on their actual mileage to Newark, Delaware.

The program

The program of study for the Master of Instruction in Economics Education degree has four sequential components:

I. **First summer:** Participants will take one course in each of three areas of study, i.e., Basic Economic Concepts, Social Science Seminar, and Economic Teaching Strategies.
II. **Intervening school year** *(off campus)*: Participants will develop an economics education implementation design AND transfer or take a course in (a) economics education and (b) education.
III. **Second summer:** Participants will complete courses in Money and Banking, International Trade, Micro Applications, and Curriculum Seminar.
IV. **Fall** (off campus): Participants will complete their economics education implementation design and complete a public policy paper by January 31, 1989.

A list of specific courses is available upon request.



Leisure

Many recreational and cultural programs are available to students on the Newark campus. The University has extensive athletic facilities and usually sponsors a summer film series, concerts and theatre productions, as well as sightseeing trips to nearby cities.

The community

Newark, Delaware, a university community with some light industry, is within easy reach of the urban centers of New York City, Philadelphia, and Washington, D.C. These cities, along with the ocean resorts of Delaware, Maryland and New Jersey, are accessible by car, bus or train. Wilmington, Delaware's largest city, is only 15 miles to the northeast and offers a variety of recreational and cultural activities.

University facilities

Classes will be held in air-conditioned University classrooms.

On-campus housing is available at reasonable rates. For participants who prefer to live off campus, the University Housing Office provides lists of rooms and apartments available on a weekly or monthly basis. Housing off campus is the responsibility of the student.

Food service is also available at a number of the University's dining facilities.

The University maintains an extensive library collection and provides inter-library loan and computer search services.

Additional information

For further information and application materials, please contact:

James B. O'Neill, Director
Center for Economic Education
110 Purnell Hall
University of Delaware
Newark DE 19716
(302) 451-2559

It is the policy of the University of Delaware that no person shall be subjected to discrimination on the grounds of race, color, creed, sex, age, ethnic or national origin, or handicapped or veteran status.

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PROGRESS MADE TO DATE

Progress to date has been quite good. In certain areas progress has far exceeded my expectations, in other areas progress has been a little slower, but still moving in a forward direction. A key aspect of my implementation plan was involved with the unification of the College Prep Economics course with the Consumer Economics course. This has become an especially important element in the overall plan of implementation. Without that unification it will always remain a situation of "us" vs. "them" within this district and the hope of teacher in-servicing, articulation, and general growth as a department will falter. While this attempt ran into some significant intitial roadblocks both at the cite and at the district level, I am very pleased to report that most of these obstructions have been cleared and it is actually beginning to look as if the unification will become a reality in the not to distant future. There is still much work left to be done in this area, however the fact that it is moving at all is very exciting and promising.

The intial phase of my implementation, as far as impacting the existing network, went very smoothly with no hitches what so ever. Much of this success is a result of the outstanding reputation of the Delaware Program. To be introduced as a participant in that program has an amazing effect of opening doors in a host of areas in economic education. I found I was immediately looked upon as an "expert" in economic education. I literally had center directors look for me as opposed to me having to look for them. Consequently I have been very busy "living-up" to their expectations involving myself with things like presenting workshops, teacher-in-services, and technical advisor for the many projects being attempted in the state. I have also been very busy in the area of developing the exciting and innovative curriculum that is in very high demand at this time.

I am very pleased to report that we are the first district in Sacramento County to be an official D.E.E.P. district. This is my current area of specific concentration. By doing this D.E.E.P. commitment in a big way will provide the impetus needed to accomplish the rest of my implementation plan. This will motivate our district to take economic education seriously, and offer a ripe opportunity to expand economic education into the elementary and Jr. High levels. Being the first district in our service area to make that committment will also act as a way to provide recognition to our district which then feeds the cycle for our district to put more of its resources in this area to meet that outside expectations of a model program. The politics of it all has really been a fascinating experience. But if that's what it takes to get things done, so be it.

I am keeping logs of the meetings, in-services, workshops, curriculum projects, articulations, etc.,etc. Up to this point I have conducted two full-day workshops on my own at Cal. State University, Stanislaus, and have been active as a technical advisor in five current projects of the center. I have given three staff in-services at the site level with many more on the calender. As a particpant I have attened a three-day D.E.E.P Leadership training seminar, as well as a three other Economic Education Seminars. Should you want to look see this log, please let me know. Bill Kerby tells me that you are planning to visit sunny California, I am looking forward to that meeting. Thank you for your continued support and advice.

Ed Van Brenk

M.I. CANDIDATE 1988

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February 29, 1988

Dr. James O'Neill, President
Delaware Council on Economic Education
University of Delaware
110 Purnell Hall
Newark, DE 19716

Dear Jim:

On February 8, the Center for Economic Education, Portland State University, held a workshop on Understanding Taxes. One of your master's students, Judy Daugherty, was of considerable help in the setting up and running of this workshop. Judy spent time writing the original proposal, which was one of 10 accepted by the JCEE. She found the site for the workshop and negotiated for equipment. On the day of the workshop she helped to manage 147 high school teachers for 4 hours. Judy has a lot of talent, and we are very fortunate to have her in our state and particularly in the area of the CEE, PSU. You have taught her well, and she is working to fulfill her master's requirements.

Sincerely,

Joan O'Bannon
Center Director

JOB/kw

cc: Judy Daugherty

Chapter Sixteen

ECONOMIC EDUCATION IN SPEECH AND DEBATE: CURRENT AND HISTORICAL PUBLIC POLICY DEBATES AS TEACHING TOOLS

By Gregory F. Rehmke

James Galbraith found the 1984 edition of the Framework for Economic Education inadequate, in part because it failed to involve economic history, and the great macroeconomic controversies. John C. Soper, in discussing Galbraith's complaints, agrees that the Framework: "fails to communicate to its intended audience what economics in general, and macroeconomics in particular, is all about. It fails to generate any intellectual excitement about the discipline and what problems it grapples with."[1]

It is no accident, I think, that students fail to receive a clear idea of the problems economics grapples with: many of the problems themselves are just too controversial. Worthwhile economic concepts are problem solving tools; they help us understand how the world around us works. But because economic concepts are so powerful, understanding them strongly affects our world views--and that is intensely controversial. Through economics, students can come to understand the effects of rent controls, protectionism, regulations, and a dozen other common public policies, that are guaranteed to generate heated arguments in their history and government classes and at home.

Rather than watering down the implications of economic reasoning, teachers can teach students how to apply economics to the real world by making use of a new classroom activity. Economic educators can turn to the already long-established tradition of high school speech and debate to bring excitement and relevance into teaching economics.

Presenting economic concepts as a means to solve today's public policy problems brings the real world into the classroom, and thereby generates interest. Further, the classroom teaching techniques that assist students in learning how to think (as opposed to what to think), are those that turn teachers into coaches, and respond to widely discussed critiques of American education in general.

Coaching and Significance

In commenting on current calls for educational reform, Mortimer J. Adler cites Theodore Sizer's book, Horace's Compromise, "the classic book on the teacher as a coach." [2] Coaching should play a larger role in education. In high school speech and debate, coaching is the center of the learning process. Students take responsibility for a portion of their own education through individual research, and their teacher/coach works with them in preparing for competition.

Mortimer Adler further cites John Goodlad of the University of Washington, who after a five-year study wrote A Place Called School. Goodlad documented that "85% of all classroom time in the United States is spent in teachers talking at students who memorize what is needed to bone up for examinations, and only 15% of the time is spent in teachers talking with students, interacting with their minds in protracted discussions." [3]

Adler says there are three different types of teaching and learning: 1) Didactic instruction in subject-matters; 2) The coaching of the language and mathematics skills; 3) The Socratic conduct of seminar discussions of the basic ideas and issues to be found in books assigned for study. Adler then attacks current reform proposals (William Bennett's proposals in particular): "Of these three Bennett is concerned only with the first, which now predominates in our schools. This is the least- effective kind of teaching and the learning that results is the least durable. In truth, it is not genuine teaching at all, but rather indoctrination by the teacher, and not genuine learning by the student, but memorization for the sake of passing exams. Genuine learning involves activity of the learner's mind; genuine teaching involves the cooperative activity of the teacher in helping and guiding the learning by interacting with the student's mind."

Separately, California superintendent of public instruction Bill Honig has called for quality instruction of history, saying: "It's my opinion that history is at the very core of values of this nation. And if you don't teach history right, you don't transmit those values."[4]

Bill Honig explained: "The idea is immersion in history. The goal is to create high school graduates who can on moment's notice give a ten-minute discourse on the virtues, as well as the shortcomings, of democratic systems."[5] One of the more popular speech events, called extemporaneous speaking, does something quite similar. 100,000 students nationwide practice giving ten-minute talks--without notes--on any chosen domestic or international policy issue. They have only 30 minutes to prepare their talks by reviewing notes and publications.

Paul Gagon, a professor of history at the University of Massachusetts authored a study of high school history texts, complaining they have become "watered-down and value-free." Gagon further criticized American histories: "you can read through the whole Colonial era and come away with the notion that not a single American ever had an idea in his head throughout the period." History textbooks, according to Gagon, offer little answer to students saying "So what?": "If students are going to be engaged, then they have to be clear on the significance of what they're studying, how it fits into the scheme of things."

Economics and Historical Debates

For those waiting for the subject to turn to the teaching of economics, let me suggest that economic education should not be separated from education in the other social sciences. Economics can be terribly boring and terribly irrelevant if isolated from history, civics, political science and government. Economics gets exciting when turned loose on the real world. More students absorb their economic views in history classes than anywhere else. By studying the Industrial Revolution and the Great Depression, students accept deep-seated beliefs about laissez-faire economics and the proper role of government in a free society.

Why is it, though, that history texts are so often boring and devoid of ideas? History (much like economics and political science) is just too controversial to be taught by talking at students--a process Mortimer Adler refers to as simply "indoctrination." It is one thing for a mathematics teacher to spend 85 percent of his time talking at students, but it is quite another for a history teacher to do so. And textbooks, in trying to temper the sharp and sometimes bitter controversies of the past, tend to squeeze out the excitement. History is a dangerous subject, and the authentic past is full of alluring and perhaps subversive ideas.

For example, what history text and history teacher would be comfortable with Patrick Henry's concluding judgement of the Constitution's checks and balances: "There will be no checks and balances, in this government. What can avail your specious, imaginary balances, your rope-dancing, chain rattling ridiculous ideal checks and contrivances? [6]

Or consider how Harvard's Bernard Bailyn surveys the thoughts--missing from our textbooks--in the heads of Americans in the founding era:

> The theory of politics that emerges from the political literature of the pre-Revolutionary years rests on the belief that what lay behind every political scene, the ultimate explanation of every political controversy, was the disposition of power... The colonists had no doubt about what power was and about its central, dynamic role in any political system... What gave transcendent importance to the aggressiveness of power was the fact that its natural prey, its necessary victim, was liberty, or law, or right. The public world these writers saw was divided into distinct, contrasting, and innately antagonistic spheres: the sphere of power and ... of liberty or right. The one was brutal, ceaselessly active, and heedless; the other delicate, passive, and sensitive. The one must be resisted, the other defended, and the two must never be confused.[7]

Is it any wonder that such ideas are judiciously left out of history texts, which instead focus on how many slaves Thomas Jefferson had, and Martha Washington's role in sewing together the flag (or was that Betsy Ross?). Lord Acton believed that the long struggle of liberty against power is the unifying theme of history. (When asked "Does power corrupt?" Acton is said to have answered, "Absolutely!") For Acton, the events of history and the books, beliefs, battles, conquests, and revolutions are pieces in the giant struggle of men to free themselves from the dominion of others. Individual liberty gradually and fitfully appears in the Western world. The preservation of liberties now achieved, and the drive for more, are Acton's answer to the student's "So what?" This view of history as an idealistic quest energizes the study of historical events and intellectual history.

History becomes, in part, a struggle between good and evil. Young people spend billions each year at the movie theater to passively watch cardboard science fiction battles between good and evil. Yet real battles with real villains and heroes fill the pages of hundreds of exciting history books and well-researched historical novels (highly recommended are Kenneth Roberts' best selling books on the American Revolution).[8]

About the only things that are uncontroversial about history are the things students end up studying--boring things like the dates when continents got discovered, wars got started, and Kings were born or beheaded.

Uncovering the Excitement of History

I was first drawn into the study of economics by my interest in history. I took an economic history class at the University of Washington from Douglass North, and we read his book, The Rise of the Western World. Economic history sees history partly as a puzzle to be solved, and that makes both economics and history exciting and fun. Why did the Industrial Revolution come first to England? Why was once-powerful Spain left so far behind? How did the United States take off from impoverished "Third World" status to become an industrial powerhouse (without foreign aid)?

A relevant and exciting way to study history is as background to current controversies. For example, solving the puzzle of United States economic growth in the 19th century can help us solve the puzzle of Third World development in our time. Each public policy issue today has a political economic history. Agricultural policy, water policy, monetary policy, U.S. policy toward Latin America, Social Security, medical care, and welfare controversies, each have a long history in America and each operates in a web of political economic relationships.

Treating awareness of current public policy issues as a goal gives new purpose to the study of history and economics. Calling upon students to stake out and defend their positions on current issues draws them into an active relationship with these issues and urges them to search historical precedent for evidence and to investigate economic theory for causal relationships.

If all this sounds hopelessly complicated and overly ambitious, let me explain that this teaching methodology already exists in American high schools. Each year over 100,000 high school speech and debate students investigate and debate public policy issues, searching internationally and through time for evidence. The study of history should have a purpose--and for most people that purpose is to better understand the world around them.

The Central Role of Relevance

Personal beliefs matter a lot in speech and debate. Personal beliefs form a core that students can build their argumentation around. These beliefs and the analysis that surrounds them are presented, defended, and reexamined in debate after debate.[9]

Competitive debate as a classroom activity can give students an excellent introduction to current events and public policy issues, can teach students research and speaking skills, and can get students excited about education. Students have a chance to learn first-hand about justice, truth, equality, and liberty. These issues ought to be more than dull facts and dry academic positions.

Too often students are handed the answers before they have asked the questions. Students are pushed to learn answers to questions that are not their own and that therefore have no real meaning to them. Students ought to have a chance to dig around for themselves in the great issues of economics, politics, and society and to find out what they personally think about them. They ought to be faced, somehow, with the real world problems that the various theories of political philosophers and economists were developed to answer.

None of us knows ahead of time what the spark will be that "wakes up" students to the world around them. Students ought have the opportunity and incentives to investigate the outside world, to find out for themselves which conceptions of justice, liberty and equality "feel" best.

Encouraging this freedom to stake out their own positions and views should not imply that their are no "real" truths or correct answers. There probably are right answers--but student are unlikely to discover them immediately or easily. Oversimplifications, straw men, and all manner of false solutions will litter the fields of discussion and debate. But the process of public discussion and debate can help uncover such positions and encourage students to find sounder views.

The right answers are not really right until students themselves understand them to be so. It serves no purpose to just tell students the right answers in mathematics, for example. Instead students are taught problem-solving tools, and then confront problems--which then must be solved individually within their own minds. Economic concepts and political concepts (individual rights, for example) are the problem solving tools for the social sciences, and current and historical public policy debates are the problems students should work on, to develop and personalize their understanding of economics.

We should remember too, that people learn best by teaching. Most of us realize that we learn more about a subject as we prepare to teach it to someone else than when we study only to prepare for tests. Our minds switch into a different gear when this new element is added to the learning process. As students prepare to discuss and debate a topic, they reach this higher level of concentration. And, when they begin debating a topic, they receive immediate feedback on how well they understand the relevant issues, just as we do as teachers when that unexpected question sends us back to our books to look up an answer. Debate is a process that turns students into teachers. Students become advocates and critics of facts and ideas rather than just memorizers.

Enter Economics

Economics enters here as the social science's most powerful tool for examining past and current policies--like free trade versus protectionism, or government investment in the economy (railroads in the 19th century, space transportation in the 20th). Economics offers a tool chest, with a number of powerful mind-tools for understanding public policy.

Perhaps the most powerful concept in economics is one of the simplest, opportunity cost. In a number of schools whose students have attended Economics in Argumentation seminars, for example, the concept of opportunity cost--like some magical weapon--has been passed down to new debate students each year. An understanding of opportunity cost works in each student's mind like a magic ring-- its beam revealing the true shape, substance and affects of each new scheme to spend taxpayer dollars for "the public good."

Property rights are another powerful concept, and their central role in a market economy is often taken for granted. The importance of property rights is most concretely shown by the problems created by the absence of such rights. The national debate topic on water policy (1985-86) provided excellent illustrations. Students learned that unless water rights were defined, enforceable and exchangeable, water gets wasted. Some California farmers grow rice in the desert because they hold only tentative water rights, and thus cannot sell water for higher valued uses. They have "usage" rights, but not "exchange" rights.

Aquifers are being too rapidly depleted throughout the Midwest and Texas for the same reasons that five students with five straws will too rapidly deplete a chocolate milkshake. Students get stomach aches but soon recover; aquifers deform or suffer saltwater intrusion and may never recover. Defining and assigning stock rights and flow rights to the water in aquifers, and allowing market prices to assign water to its highest valued uses, would do far more to preserve aquifers and conserve water than any alternate federal policy.

Once property rights are assigned, then prices work to collect and disseminate information, which then creates incentives for producers and consumers to coordinate their behavior, and to work in an unintended way for each others benefit. With the debate topic on U.S. agricultural policy (1986-87) students learned that droughts in the cornfields led to more Wheaties on the breakfast table. Prices conveyed information through the marketplace, and parents substituting Wheaties for higher-priced Corn Flakes were acting as if they knew about the shortage, and as if they cared about conserving corn for higher-valued uses--grits in the South, for example.

Public choice theory, another powerful set of economic tools, helps with the coming year's debate topic on retirement security for the elderly. Students can use public choice insights to see the deeper workings of the world's largest family of transfer programs. Steadily growing since the it's inception in the 1930s, Social

Security is a textbook example of how public sector programs expand and try to suffocate private sector rivals.

Another Advantage for the Speech and Debate Approach

Another advantage comes from the difficulty inherent in dealing with issues of proper government policy and social justice, from within government institutions. Whatever the ultimate truth of an issue, it will likely be harder for students to reach a conclusion that condemns the status quo in a school dependent on the status quo for its operation. History as well as current public policy issues are in constant danger of being molded to legitimize the status quo.

As an example consider a recent debate topic on poverty and unemployment (1984-85). To prepare for debate competition students had to deal with a wide range of perspectives on current welfare policy. They read the views insisting that poverty is rampant in America. Some sources put the number of poor at 20-60 million, and argued that only massive public works programs like those in the 1930s could solve the "crisis of poverty."

In our economics seminars for that year we discussed with students the views of various economists that were sharply critical of current welfare programs. We discussed economist Walter William's views that much of the unemployment problems today stem from a "hardening" of the U.S. economy. Williams points to the hundreds of crafts--from carpentry and plumbing to taxicab driving--that have been steadily closed off as entry level jobs into the U.S. economy. These jobs had traditionally allowed immigrants to grab hold of the lower rungs of the economic ladder and then climb into the middle class. Thomas Sowell's excellent book Ethnic America is a compelling history of American ethnic groups in the U. S. economy. Sowell, as well as Williams, now point to the manifold regulations and licensing restrictions that have in effect cut off these lower rungs of the economic ladder. An earlier economist, Nassau Senior, explained in the 1800s why England's Poor Laws encouraged unemployment and increased poverty.

In our Economics in Argumentation seminars we covered the wide range of analysis available from economists on the subject of poverty and unemployment, and because we were preparing students to debate both sides of the resolution, we covered many strengths and weaknesses of each of these analyses.

Yet consider that virtually all sources--from those who say government does too little, to those who say government does too much and does it badly--agreed that the status quo is a bad system and should be changed. At the same time, coverage of welfare issues in textbooks or the average classroom would hesitate to provide these critical views of the status quo. Criticism of the way things are now gets diluted before finding its way into our textbooks. And lack of controversy makes for dull reading and poor learning.

Debate competition provides strong incentives for students to do original research and to tackle public policy issues head on. And the goal of understanding public policy issues becomes the motive for studying economics, history, and political philosophy.

The basic issues do not change much. Free trade and protectionism, paper money and inflation, military spending and foreign policy, regulation and special interest groups--all these issues in today's headlines contain new names and new details, but read about the same as headlines of one, two or three generations ago. The issues only seem new, because the journalists who report them and the public that reads about them are generally ignorant of the past.

No passive citizen or student can hope to gain a grasp of the issues of the day, and their history, from just newspapers and the evening news. Without a knowledge of history we are forever children. This is the ignorance Jefferson warned us of. "If a nation expects to be ignorant and free," he said, "it expects what never was, and will never be."

Speech and Debate to the Rescue

Bill Honig insists that the teaching history "right" plays a central role in teaching values. Mortimer Adler insists students be coached and talked with, not talked at. Paul Gagon argues that history should be significant or students will, rightly, say "So what?" What teaching methodology can teachers turn to that has these characteristics?

High school speech and debate may hold many of the answers. Under the protection of the age old American tradition of competition, student are at liberty to advance and defend views of all kinds on issues of public policy and values. The competitive nature of debate motivates students and personalizes their study. Value and policy debaters construct cases and positions that over time become more and more their own.

The educational energy created by the activity of debate is dramatic. So much so that it invites us to reconsider how we teach other courses in our schools. One of Jefferson's favorite quotations was from Euripides, "For with slight efforts how would one achieve great results, it is foolish even to desire it." Perhaps debates can nudge students into greater efforts.

American history offers a powerful platform for such debates. For the first 100 years, the U.S. government's powers repeatedly grew and shrank, all amid fierce debate in congress and in the nation's newspapers, town halls, taverns and churches. The proper functions of government have never been fully agreed upon, always there have been those who would strip away federal powers and others who would gather more powers from society and grant them to government. How often are young people made aware of these debates? How many are aware of the radically different role most early Americans saw for the federal government than that which Americans accept today?

We cannot hope to know without studying history. And a thorough understanding of history is always bound up with the principles of political economy. Yet as long as the history and economics we offer our young people is bound in textbooks and classrooms the dead facts of American history will stay dead. Why not debate these issues? Why not debate the issue of the passing of the U.S. Constitution? The founding fathers did. The Constitution was bitterly opposed by such great Americans as Patrick Henry and George Mason. We can step into the 18th century and resurrect these debates and import to our day the passions and fears, the grand elocution and rhetoric of these great men.

How are students supposed to learn about this from a textbook? Especially from a textbook that has only survived the selection process by eluding the wrath of all special interest groups.

In conclusion, the format of competitive debate, where students are left to uncover positions that have a personal interest to them, gives them the freedom to grow into their own ideas over time. Even silly or terrible or stupid positions and ideas, if freely developed can be just as freely disposed of. This is especially true in competitive debate where there is a tendency for the weak and unclear ideas to be found out by opponents.

Students deserve a chance to freely explore the great issues of society and government. They deserve a chance to develop and defend their own views, to propose their own reforms and to demand their own conceptions of liberty and justice for all. Speech and debate competition has a proven track record in drawing and focusing student's energies to accomplish just these ends.

Unless speech and debate competition, or something very much like it, grows to encompass more teachers, more subjects and more students, America may sink back into the social order that always was, before men like Jefferson, Madison, Jay, Mason and Henry along with thousands of citizens who were vastly knowledgeable of history, created, only in America, this new social order based on human liberty and equality before the law.

FOOTNOTES

1. "On Teaching a Fractured Macroeconomics: A Comment," John C. Soper, Journal of Economic Education (Spring 1987) p. 236.
2. "Learning Disputes," L.A. Times, January 10, 1988, Part V, p. 1.
3. This and quotation in next paragraph, ibid.
4. Ibid.
5. "Time and Depth for History Studies, Insight, Sept. 21, 1987, p. 60.

6. Henry's attack on the Constitution comes from the Virginia ratification debates. In these famous debates Patrick Henry centered on the theme of power. "All power, he foresaw, ultimately would end in the hands of the central government. What then? Will the oppressor let go of the oppressed? Was there ever an instance? Can the annals of mankind exhibit one singly example, where rulers overcharged with power, willingly let go the oppressed? The willing relinquishment of power is one of those things which human nature never was nor ever will be, capable of. ["When Virginia Joined the Union" published by the Virginia Commission of Constitutional Government, 1963]

7. Bernard Bailyn, Ideological Origins of the American Revolution (Cambridge: Harvard Univ. Press, 1967), p. 55.

8. Kenneth Roberts: Rabble in Arms, Northwest Passage, Lydia Bailey, Arundel, Oliver Wiswell.

9. Teaching itself can be subversive, as discussed in Teaching as a Subversive Activity by Wiengarten and Postman. The author's attack on mediocrity in education and on the irrelevance and general dullness of textbooks surely is as important today as it ever was. One of a number of unexpected questions posed by the authors: If all public school textbooks were to somehow disappear overnight, would the world be better off or worse off?

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Appendix B: Integrating Speech and Debate into Classroom Economics, History and Government Courses

I. American History. Unit Title: "Power vs. Liberty." A look at the actual thinking of early Americans.

A. Setting the stage: reprint "Power & Liberty from Bernard Bailyn's book, Ideological Origins of the American Revolution (Harvard University Press, 1967).

B. The debates: reprint: "When Virginia Joined the Union," a lively newspaper-style report on the Virginia ratification debates. In these debates, concern centered on whether safeguards in the Constitution were strong enough to prevent gradual accumulation of power by the newly proposed central government. Such power, Patrick Henry, George Mason and other Anti-federalist critics believed, would come at the expense of state powers and individual liberty. Students confront argumentation implying the Constitution was a mistake! and that its passage would eventually lead to a totalitarianism. Students can join in the actual debates, taking sides in the classroom. And since many of the fears then voiced by antifederalists, have since come true (students will have the opportunity to debate whether they have or have not), this unit is as current as today's news.

Central to such debates and discussions is the definition of individual and property rights understood by the founders, and contrasting definitions of those rights as understood by politicians and judges today. (Additional economic concepts can be drawn into these "historical debates" through a presentation of public choice theory.)

II. Economics: Unit Title: "Economics, Property Rights and the Environment" The purpose of this unit is to show the central role of defined, enforceable, and transferable property rights in a free economy. First comes an introduction or review of basic economic theory: scarcity, choice, opportunity cost, and supply and demand. Next come case studies:

A. "Bureaucrats and Bighorn Sheep" and "Conservation Texas Style" (two articles from past Econ issues) the property rights-based "New Resource Economics" and explain how property rights have preserved exotic animals on private land in Texas, while these same animals have been decimated on state-owned game reserves in their native African habitats. Additional materials on natural resource economics will be made available.

B. "To Save the Whale: Conservation Through Ownership": John Majewski wrote this article (again in a past issue of Econ) suggesting an innovative way to save the whales. His analysis contrasts the abundance of privately-owned cattle with diminished population unowned whales. His plan calls for using new radio-transmitter technology to define and assign property rights to whale. (This article was carried as an opinion-editorial in a number of newspapers, reprinted in the English publication Economic Affairs and picked up by the BBC, which later interviewed Majewski on BBC Radio.)

C. "Water Rights and Water Conservation" This lesson is derived from materials for the 1986 debate topic of water policy. Imagine five students, for example, each with a straw, but sharing a single common milkshake. What can we say about the rate of depletion we will observe for this milkshake? What is the likelihood of students getting stomach aches? This is the tragedy of the commons, which though often cited as an argument against capitalism, can be turned (in classic debating style) into a powerful argument for property rights. The property rights alternative calls for clearly defined ownership rights to the milkshake, say by putting it into five separate glasses. If we replace straws with wells, this same analysis applies to aquifers. Aquifer depletion will result when adjacent property owners sink their wells into an unowned common pool of water. Every one has an incentive to deplete it as fast as possible--because they know that it they don't someone else will. Economist Terry Anderson (in his book Water Rights: Ending the Policy Drought) calls for defining stock rights and flow rights to aquifers. Stomach aches go away, but deformed aquifers and those suffering from salt-water intrusion may never recover.

III. Government: Unit Title: "The Seen vs. the Unseen: The Problem of Special Interest Groups."

This section is related to the "Power and Liberty" unit above. It centers on Public Choice insights into the working of government. The lesson starts with the first and foremost analysis of American Government, The Federalist Papers, and examines the concern in Federalist #10 with the "clamoring of interests each bidding for government favor." Examples both from early America (land speculators, steamship lines, railroads, protectionists) and the from the present (sugar, roses, agriculture, computer memory chips, and any of a thousand other present day examples of present-day protectionism, regulation, taxation and subsidy) will be cited to show the way special interest groups work through government for protection from competition. The benefits of such legislation are concentrated and clearly visible, but the costs are diffused throughout the citizenry and costly to identify, measure and publicize.

Henry Hazlitt's discussion of "the seen and the unseen" (from Economics in One Lesson) illustrates why pressure builds for government action, even where such action does not (and usually cannot) provide net benefits. Again students will have the opportunity to debate specific policy issues, and whether the government should or should not come to the aid of various special interest groups. Students can assume the roles of special interest groups (or the lobbyists who represent them) and present their arguments for intervention or subsidy to the classroom. There are many ways to design such exercises to illustrate the powerful incentives for concentrated beneficiaries and their agents to press for subsidies, and the lack of incentives for the public to invest time and money in defense.

For each of these sets of lesson plans preliminary readings are available from past Economics in Argumentation publications. A separate teachers guide with lesson plan ideas and suggestions for debating policy implications of ideas presented.

Since over 6,000 school have speech and debate programs, history, government and economics teachers desiring to take advantage of speech and debate formats could ask for suggestions and assistance from their schools debate teachers or students.

Copies of the articles mentioned above are available upon request.

Chapter Seventeen

DEMYSTIFYING ECONOMIC EDUCATION THROUGH PARTNERSHIPS

By Peter J. Harder

The concept of business and education partnerships predates the famous A Nation at Risk report of 1983.[1] Antecedents can be found in the 1920s, the 19th century and perhaps even earlier in the history of education. But it was the report itself that highlighted the importance of bringing outside resources, including business, into the nation's schools.

Early advocates for partnerships were not asking for business participation as a frill; they envisioned help from business as an essential ingredient for better schools. As the Assistant Secretary for Educational Research and Improvement, Donald J. Senese observed, "promoting excellence in education should go hand-in-hand in building successful business partnerships.[2] Speaking at a National School Board Association conference, Senese observed what Junior Achievement has understood for years: To realize the most from school/business arrangements, they need to be more than one-shot deals; they should be developed so that they can be maintained on a continuing and expanding basis."[3] This paper, in part, will examine what Junior Achievement has learned about partnerships before and after A Nation at Risk. It will conclude with some observations about and suggestions for the economic education profession. Junior Achievement believes that business-education partnerships in economic education help to break down the mystery of economics and, thereby, invite even greater interest in the subject by educators and business people alike.

Junior Achievement's Start

Junior Achievement is the oldest economic education organization in the country, originating in 1919 through the work of New England business leaders who desired closer ties among industry, agriculture, and the consumer. Organized first as separate clubs for eight- to ten-year old boys and girls, Junior Achievement adopted the learn-by-doing method of instruction. In each of its four programs this method is employed through volunteers, usually local businessmen and women. During the past year, over 40,000 business volunteers helped bring economic education to American classrooms. Partnership is alive and well in Junior Achievement.

For its first 50 years Junior Achievement concentrated on one program, the program most people think of when they hear "JA". In this program, high school students form companies by selling shares of stock. With the help of local business volunteers they keep records, produce and sell products, and conduct other business operations. This after-school or evening program is Junior Achievement's smallest program. Last year 90,803 students formed 3,205 companies.

Project Business. In the early 1970s, Junior Achievement developed its first in-school program for students in grades seven, eight, and nine. Designed as a supplementary program to enhance the middle-school curriculum, Project Business brings business volunteers called consultants into classrooms to teach lessons about business and economics with material developed by Junior Achievement. Selecting from seven topics including "The Nature of Economics" and "Competition," consultants visit classrooms once a week for up to 14 weeks. Last year 447,941 students participated in 17,636 classes.

Business Basics. Business Basics, Junior Achievement's elementary education program for fourth, fifth, and sixth grades, is a supplemental activity designed around four lessons in business: organization, management, production, and marketing. In this program the partnership volunteer is usually a high school student who has participated in either the original program (JA) or Junior Achievement's newest high school program, Applied Economics (AE). Last year, Business Basics students numbered 307,103 in 11,888 classes.

Applied Economics. Junior Achievement's newest program is Applied Economics, a regular high school economics course for credit that also features a business consultant who visits the class one day a week during the semester. Trained by Junior Achievement to work with and support the classroom teacher, the consultant visits the class weekly to illuminate and apply economic concepts through local examples. The class provides a text and study guide for the students and guides for the teacher and business volunteer. Students study the same economic concepts found in traditional economics classes. In addition, however, students also form businesses in the classroom and study economic concepts with the aid of computer software. Last year 205,603 students studied high school economics through Applied Economics.

Applied Economics anticipated one of the recommendations of the A Nation at Risk report. It recommended that "New instructional material should reflect the most current applications of technology in appropriate curriculum areas, the best scholarship in each grade."[4] Applied economics' use of a computer simulation to teach economics has won the praise of professional educators and captured the imagination of business partners. At the same time educators have lamented the limited use of computers in the schools. According to Quality Education Data, 95 percent of all schools have at least one computer. The National Assessment of Educational Progress reports, however, that only 5 percent of eleventh-grade students used computers to help them learn social studies. That compares to 29 percent who used computers in mathematics, 17 percent in English and 15 percent in science.[5]

The development of the Management and Economic simulation Exercise (MESE) software for Applied Economics is a case study of how exciting and productive a partnership between business and education can be. MESE I, the first simulation for Applied Economics, was a modification of computer formulas given under a limited license to Junior Achievement by the IBM Corporation. IBM also provided system engineers to work together with other software developers and with educators from Junior Achievement to reorganize the original IBM software. The goal was to develop new material that would challenge the brightest high school students while at the same time be sufficiently inviting and motivating to attract low-skilled and at-risk students. Junior Achievement did it.

Applied Economics was recognized in 1987 by Social Education as one of the few promising programs in the country to employ computer technology.[6] The National Council for the Social Studies will again focus on this curriculum in its forthcoming Bulletin No. 82 in the article, "Teaching Economics in the Information Age." [7] That article discusses the uniqueness of Applied Economics, its use of technology, and the value of business-school partnerships.

John Driscoll, a high school economics teacher involved in the development of Applied Economics, observed, "JA has for many years used its special position to build bridges between the business community and schools. Applied Economics is an important model for this kind of partnership." [8]

What Have We Learned?

IBM and other leading businesses were willing to support the development of Applied Economics because it was in their self interest and because Applied Economics was a good idea at the right time.[9] William G. Layton, Corporate Vice President of human resources for Holiday Inns, Inc., said it simply, "[AE] will carry the message of the American free enterprise system to thousands more young people, and we believe the computer-supported curriculum will be interesting and provide good skills training for students."[10]

More than simply "interested," American business leaders who support Applied Economics are captivated by the idea of teaching and learning economics through an interactive and fun-filled computer experience in a course that not only teaches economic concepts but also teaches about the challenges and rewards of business.

Consultants to Applied Economics frequently comment that they wish they had had a course like Applied Economics in high school or college, one that would have encouraged them to enjoy the subject and one that would have helped them see the practical implications of economics for local business.[11]

Businesses have supported Applied Economics because the course provides opportunities for students to develop work-related "people skills," such as following and giving directions, coming to work (class) on time, working cooperatively in small groups to reach consensus, and developing the ability to think rationally about ethical dilemmas as presented in economic and business case studies. The extensive research on Applied Economics reports that students learn economic and business concepts, but moreover, in Applied Economics students say they also learn about themselves and about working with others.[12]

The Applied Economics partnership experience illustrates that partners are looking for the most return on investment. Improving economic literacy while at the same time teaching skills through a new application of technology is a very attractive partnership goal.

Timing is also important, as a recent history of Junior Achievement notes: "Applied Economics was a well-timed effort by JA. Schools were actively seeking new methods to enhance their own programs of economic education. Many states were mandating economic education, and the schools turned to JA for help."[13]

Yet another lesson learned by Junior Achievement from the Applied Economics experience is that for partnership activities to be successful they need very specific goals. All of the partners concerned must accept those goals along with clearly defined procedures for changing them. The Committee for Economic Development (CED), an independent, nonpartisan research organization, recently reported the results of seven corporate case studies and 22 "mini" cases of business partnerships.[14] Cited are sixteen "lessons learned" from these cases.[15] The first three deal with establishing clear and simple goals. The CED report concludes that, five years after the 1983 report, A Nation at Risk, the future of business involvement in education shows no sign of abating or disappearing.[16]

Economic Education as a Profession: Observations

Will economic education continue to be funded at its current level? Is it reasonable to assume that when and if the total corporate-giving pie to education grows, economic education will receive a larger slice? Junior Achievement's work developing Applied Economics indirectly encouraged a dialogue on the nature of teaching and learning economics at the high school level.

Applied Economics works and continues to receive support because the volunteers involved see for themselves that the contributions from their firms go directly to help students overcome the mystery of economics. A consultant from McGraw-Edison observed, "High School students do not take information at face value; they are skeptics and questioners. I provide the link between all those theories in their books and actual business practice."[17] We need to find more ways to demystify economic education. The practical and popular programs of Junior Achievement that put business people into classrooms around the country will continue to reflect favorably on economic education.

The profession needs to examine and clarify its mission. The public and our funders require this clarity. Conferences such as the 1988 summer conference on Economic Education in the Precollegiate Setting, organized by the Reason Foundation and underwritten by the Towbes Foundation, are certainly a step in the right direction. However, the very idea of an economic education profession should be examined.

In the preface to his tragedy, The Doctor's Dilemma, George Bernard Shaw labeled the medical profession "a conspiracy to hide its own shortcomings. No doubt the same may be said of all professions."[18] He included education in his list of other professions. Should we include economic education in this harsh assessment? Perhaps not, but if we are being honest with ourselves, we should.

The experience of Junior Achievement suggests four areas of concern: the language and culture of exclusion, uncertain certification, lack of popularizers, and a lack of national statistics. Consider the issue of language.

Educators have frequently told Junior Achievement that they would like to do more economic education in their curriculums. However, they don't have the teachers to move into economics from other disciplines in the social studies that apparently, at least in the minds of some teachers, are easier to teach. On a related matter, during the recent National Assessment of Educational Progress (NAEP) debate, players close to the scene informed us that legislators were unwilling to require economics testing in the new NAEP, in part because of the nature of economics itself. Some legislators took the position that the public finds the subject to be too confusing and too value laden.[19]

How much background in economics should a teacher have to be adequately prepared to teach economic concepts? Clearly the answer depends on the level of instruction. However, according to Robert J. Highsmith, Chief Economist and Director of Research for the Joint Council on Economic Education, scholars suggest that at least 12 to 15 hours is necessary?[20] Informally polling professionals in the field six years ago as part of the development of Applied Economics, Junior Achievement reached a different conclusion. JA learned that while more hours of economics would be desirable, many economic education professionals believe that as few as 6 hours would suffice. The profession needs to agree on this matter. At the very least, more discussion seems appropriate.

We have no nationally recognized spokesperson to articulate the mission of economic education. Various groups within the profession speak from time to time, but not with the clarity of purpose and public understanding enjoyed by others--for example, geography educators. However, there are positive signs in this regard.

Through the coordinating work of the National Federation of Independent Businesses Foundation and the Hudson Institute to bring together the Joint Council on Economic Education, the Foundation for Teaching Economics, and Junior Achievement, Inc., we will soon have a joint statement on the need for economic education that the profession can rally behind.

Still Needed

I conclude with two specific recommendations. If we are to help the education reform movement move forward and build upon the partnership relationships we have enjoyed, we must be more precise about our mission and more precise about the current status of economic education. We have no reliable national statistics about how many students are studying economics at any level. Some states are very specific about the numbers of students studying economics, others are not.[21] If we are to attract additional public attention to the need for more economic education, we should have an annual industry report, a kind of national barometer to gauge public knowledge. Imagine the value of Dan Rather announcing the annual economic education index on the evening news.

The second recommendation has to do with what Ernest Boyer, President of the Carnegie Foundation for the Advancement of Teaching, referred to recently as "completing the course" of school reform.[22] He raised four "back to basic questions" that he recommended be used to measure the quality of the reform movement of the 1980s. They all can be applied to the economic education profession:

Can we attract and hold outstanding teachers?
Can we agree on the content to be taught?
Can we effectively evaluate the students?
Can we serve all children, not just the most advantaged? [23]

We have answers to all of these questions now. However, the dialogue must continue and be broadened to include parents, students and, where appropriate, the business partners who support us. Junior Achievement has learned that when business partners are encouraged to look in and participate in the programs that they support, they like what they see.

FOOTNOTES

1. A Nation At Risk: The Imperative for Educational Reform, The National Commission on Excellence in Education, Superintendent of Documents, Washington, D.C., 1983.
2. Donald J. Senese, A Commentary Prepared for the "School/Business Partnerships for Progress, Profit and Productivity" Conference Sponsored by the National School Boards Association, Hyatt Regency, Washington, D.C., January 11, 1986, p.l.
3. Ibid., p.5.
4. A Nation At Risk, p. 29.
5. Edward B. Fiske, "Computers Are in the Classroom, But No One is Paying Much Attention to Them," N.Y. Times, June 29, 1988, p. B6.
6. Charles S. White, "Teachers Using Technology," Social Education, January, 1987, pp. 44-47.
7. National Council for the Social Studies, Bulletin #82, Teaching Social Studies: Portraits from the Classroom, in press.

8. John Driscoll, "The Private Sector and Public Schools: A Partnership," Warner/AMEX Cable Television, Reston, VA, June, 1985.

9. IBM, together with the Xerox Corporation, Hewlett-Packard, and the Tandy Corp. provided the personal computers that were distributed to the schools. A major grant from the W.K. Kellogg Foundation provided for the development of Applied Economics. A Pew Memorial Trust grant facilitated the dissemination of Applied Economics throughout the country. The following is a complete list of the businesses and foundations that assisted in either the development or implementation of Applied Economics: Amon G. Carter Foundation, Anonymous Donor, Parker Hannifin Corp., Aetna Life and Casualty, J. Howard Pew Freedom Trust, Atlantic Richfield Co., Phillips Petroleum, Armco Steel Corp., Reader's Digest Association, Coca-Cola Co., R. J. Reynolds Industries, E.I. DuPont De Nemours & Co., Scott Foundation, Eastman Kodak Co., Sid W. Richardson Foundation, Exxon Co. U.S.A., Standard Oil Co., General Electric Co., Tandy Corp., GTE Foundation, Taylor Foundation, Hewlett-Packard Co., Tenneco Inc., Hillcrest Foundation, Texas Gas Resources Corp., Holiday Inns, TRW, IBM Corp., Wells Fargo Bank N.A., Mobil Foundation, Xerox Corporation.

10. William G. Layton, as previously quoted in Business Education Forum, "Junior Achievement Bridges Business/Education Gap," 1 November, 1983, p. 17.

11. Corporate interest in the Applied Economics computer simulation as a teaching device has been so keen that several Junior Achievement areas now conduct seminars for corporate managers to teach them the economics of pricing, production, marketing, plant investment and research and development decisions as revealed in the simulation.

12. Formative Evaluation Research Associates, Applied Economics Meta Evaluation 1982-1985; Submitted to Junior Achievement, Inc., May, 1987.

13. Joe Francomano, et al., Junior Achievement: A History; A Personal Account of Managing Change from Drill Press to Computer, Junior Achievement, 1988, p. 113.

14. Committee for Economic Development, American Business and the Public School: Case Studies of Corporate Involvement in Public Education, Teachers College Press, 1988.

15. Ibid., pp. xxi-xxii.

16. Ibid., p. 229. A less optimistic view is expressed by the American Association of Fund-Raising Counsel's Trust for Philanthropy when it reported recently that while a record $10.5 billion was donated by individuals, corporations and foundations to education institutions last year, for the first time in several years, the growth in the rate of giving slowed. Education Week, Extra Edition, August 3, 1988, p.3.

17. Jeffrey F. Voelz, Research and Engineering, Onan Division, McGraw-Edison, letter to Junior Achievement, St. Paul, Minnesota, June, 11, 1984.

18. George Bernard Shaw, The Doctor's Dilemma, Definitive Text (New York: Penguin Books, 1954, pp. 15-16).

19. Michael A. MacDowell, Joint Council on Economic Education, As related to the Education Advisory Council, NFIB Foundation, Colorado Springs, June 20, 1988.

20. "Report Card on Economic Literacy: What Do Teachers Know?", Issues and Impact, February 1988, p.l. Based on a 1968 study by Phillip Sanders and G. L. Bach.

21. For example, the state of Washington collects data on what courses schools in the state offer. It collects no data on how many students are studying economics. California and Texas, on the other hand, do count the number of students.

22. Ernest L. Boyer, "School Reform: Completing the Course," NASSP Bulletin, January 1988, pp. 61-68.

23. Ibid., p. 61.

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Chapter Eighteen

THE ROLE OF BUSINESS IN ECONOMIC EDUCATION: OLD PROBLEMS; NEW HOPES

By Anthony Finizza

Background

Economic education is caught in a cross-fire among academic economists, state governments, and the business community. Economic educators often supply the ammunition.

The State's Attitude Toward Economics Education. It is fashionable to mandate the teaching of economics in high school. Twenty-eight states, including California, require a semester course in economics for a high school diploma. In 1985 California initiated its mandate and provided "seed money" to be "matched" by the private sector.

California reveals its attitude toward economics education in two ways. First, the state grossly underfunds the effort. Annual state funds of $300,000 fall short of the amount needed to train enough teachers in time for the 1988/89 school year.

Second, the state needs the Business Roundtable, a consortium of California's largest companies, to put forward an additional $100,000 a year to fund an economics education consultant, a job that most states have on their own payroll. That laudatory gesture by the Roundtable is also not enough to do the job, since most of their money is earmarked for salary and not programs.

Academic Economists' Attitudes Toward Economics Education. The economics profession generally opposes formal economics training before college. In 1961, the National Task Force on Economics Education said: 1) it is better to get beginning economics students in college who have not had high school economics, because you generally have to unteach a good deal of what they learned in high school; 2) Economics is to difficult and too important to teach in high school; 3) Hence it is better to do nothing at all with economics in the high school.[1]

In a Midnight Economist radio broadcast Bill Allen of UCLA echoed this view: "'Economics education'" has blossomed into a growth industry. [The California] legislature had a badly conceived notion of what the mandate is to achieve and no notion of how it is to be achieved or the costs entailed in a sensible effort to achieve it.... Only a handful of high school teachers now have appropriate background...and faculties of schools of education are not prepared to rectify deficiencies....The public schools teach few things well-- and economics will not be one of the few. It would do net harm to teach economics badly. Since it will be taught badly if taught at all, don't teach it.[2]

The Business Community's Attitude Toward Economics Education. Bewailing the public's low state of economic understanding is also a favorite recreation of corporate executives. They correctly perceive the mischief that ignorance can do at the ballot box, in regulatory decisions and in the media. Then, why do they not rush to embrace a concept that improves such understanding through greater emphasis on economic education in our schools? The answer is that they fail to see a benefit over the short term. The process of educating teachers who then (presumably) educate youngsters who will then (presumably) grow up to be economically sophisticated adults is too tenuous for the corporate executive oriented toward quarterly and annual operating results. As sound as this strategy may be over the long term, it fails to deal with the fact that businessmen are the strongest adherents to Keynes's dictum: in the long run we are all dead.

Economic Education's Attitude Toward Economics Education. Although the need for economics education was recognized in the early-1960s, few high school teachers have had proper economics education. As Michael MacDowell, President of the Joint Council on Economic Education, has stated: "only 25 percent of graduating teachers' transcripts show even a single course in economics."[3]

William Walstad and John Soper support the idea that economics education has raised the economic literacy level in the United States, but they are silent on how much progress should have been achieved. They suggest that: "significant improvements in the economic literacy of U.S. high school students will be made when students take an economics course from teachers who have taken many economics courses and who teach macroeconomics and international economics, and in a school district that had made a substantive commitment to economic education."[4]

Old Problems

One of the major reasons for the failure to implement economic education successfully in California high schools is the inability of economic educators to apply economic thinking in the pursuit of economic thinking. Their approaches employed often violate the very principles that are at the heart of economics education. Opportunity cost, scarcity, comparative advantage, and similar concepts are often flaunted in the implementation of economics programs.

Another reason is that business supporters of economics education also violate their sacred principles of planning, cost/benefit analyses, and marketing. For example:

1. The economics education effort did not utilize comparative advantage.
Business' comparative advantage with respect to education is its ability to raise capital and to impart tested business planning and evaluation practices to the running of the effort. The educational system's comparative advantage is the development of programs and materials, and the identification of good teachers to handle the difficult subject of economics. In California, in the early 1980s the link between the business and education community was weak and trade did not take place. Business seriously underfunded the education effort and the educational system did not provide a quality product. As an example, the forerunner of CCEE used academic center directors to raise funds with only mediocre success.

2. The economics education effort has been underfunded.
The 1982 Long Range Plan of the California Council on Economic Education's (CCEE) predecessor organization, the Economic Literacy Council, projected a five year (1983-1987) budget of $7,770,000 to accomplish an ambitious range of objectives, including the teaching of an additional 1,000,000 students each year. The actual results of the fundraising effort and, hence, the fulfillment of the goal fell far short of the target. California businesses and foundations contributed about $1,250,000 to CCEE over this same period. Including the $450,000 contributed by the California legislature, the actual funding was $1,700,000 or $6,000,000 short of the target. One reason for the tremendous shortfall is undoubtedly the ambition of the program, but more importantly the inability of economic educators to explain and clarify the benefits to business of a literate citizenry.

3. The economic education delivery system is inefficient.
An effective organization must have a structure that facilitates achievement of its goals and strategies. The delivery system for economic education in California is a loose confederation of Centers for Economic Education, abiding by loose guidelines of the JCEE, itself a loose confederation and adhering to even looser guidelines of the State Council. It was as if a laissez faire economist developed the process.

The Centers report to their campuses and the directors serve at the pleasure of the local campus chancellor or president. Since the selection of Center Directors is a local campus matter influenced heavily by campus politics, the state council can only display minimal control, if any, over the Centers. The use of moral suasion is the only tool available. Many of the Centers in California enjoy a national reputation; others are just ordinary. There are no checks and balances on quality.

4. The network of Centers was not established using cost/benefit principles.
California has too many Centers. The founders of CCEE felt it wise to establish a Center on each campus of the CSU system. I call this the AT&T approach to economics education--a center on every corner. There was no attempt to assess the needs of the community and no attempt to focus efforts on heavy student areas.

5. The programs were not evaluated on a competitive basis.
The allocation of funds was not handled as if it were a scare resource. This became a burden, especially when you have to distribute $300,000 of state funds among 23 Centers. With a spirit of egalitarianism the early RFPs imposed a $15,000 ceiling on a single Center's request for funds. This is curiously close to the average funds available per center. Thus, the ceiling became the floor. Since three of the centers do not

request funds, it all worked out: 20 times 15 equals 300. CSU Bakersfield (the smallest campus with 3,000 students) gets $15,000; CSU San Diego (the largest campus with 30,000 students) gets $15,000. Furthermore, the allocation of monies did not (and does not) allow for the existence of an overall strategy for implementation of the mandate.

Such are the problems that had to be dealt with and have to be dealt with in order for the efficient implementation of the charter of the economics education movement in California. Fortunately, there are hopes.

New Hopes

The problem areas identified above can be corrected or improved. We have implemented many of the ideas expressed below; we are considering the rest.

1. We use Restricted Grants to impose control and accountability on the system and at the same time increasing the credibility of the Council.
2. We have imposed Cost/benefit ideas on the program review process. In the latest review round the grants were made conditional upon evaluation at the conclusion of the program.
3. We initiated the Adopt-A-Mentor Teacher program. Businesses and individuals can adopt mentor teachers trained by the CCEE. This uses the comparative advantages of the education and business communities.
4. A Proactive Model for the Implementation of State Mandates to Teach Economics has been created by Dr. Marilyn Kourilsky, the Executive Director of CCEE, and funded by a national foundation. It is currently in its first year of operation.
5. We have funded an ongoing Network of Center Directors. The directors meet regularly to learn and discuss the latest research on pedagogy.
6. The use of satellite teaching by Bill Kerby of CSU Sacramento is a bold experiment. Using an existing state network, he and the Council are testing the approach tested for potential multiplier effects and cost containment.
7. Rationalization of the Center Network is being discussed. One idea is to have three well funded maxi-Centers (one each in Northern, Central, and Southern California) and a set of mini or satellite centers, which can draw upon these larger centers.
8. An explicit tie-in with the California Master Plan for Education is being considered.
9. We have entered into discussions aimed at Clarification of the role of the State Council and the Joint Council.
10. We plan to improve our ties with Business. Economic education must quickly find strategies and activities that offer short-term attractions to the business community without sacrificing the long-term goals of economics education. The executive must be made to see a direct benefit to him, his company, or the business sector in general if he is to part with a portion of his hard-earned profits. The CCEE tool box must be enhanced through the addition of new programs. Some might include: (a) A system of recognition for outstanding work of key business leaders in furthering economic education; (b) An clearinghouse where economic information can be provided for the media; (c) Extended education programs for the adult community, in particular, employees of the business.

FOOTNOTES

1. G.L. Bach, "Economics in the High Schools: The Responsibility of the Profession," American Economic Review Proceedings, May 1961, 51, 579-86.
2. William Allen, "Midnight Economist: Broadcast Essays XII," Institute for Contemporary Studies, July 1986.
3. Michael MacDowell, "Increasing the Public's Understanding of Economics: What Can We Expect From the Schools?," American Economic Review Papers and Proceedings 76 (May 1986): 145-148.
4. Walstad, W. and Watts, M., "Teaching Economics in the Schools: A Review of Survey Findings," Journal of Economic Education 16 (Spring 1985): 135-45.

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Chapter Nineteen

OBTAINING FUND-RAISING PARTNERS FROM THE CORPORATE SECTOR FOR ECONOMIC EDUCATION

By David Jones

The Council for Aid to Education's recent report noted that corporate giving to colleges and universities increased 86.4 percent between the 1981-82 academic years and the 1986-87 academic years. The Council estimated that corporate support for academic programs and institutions exceeded $2 billion in 1986-87. This estimate includes support for postsecondary and precollegiate schools. Corporate support increased more than five times the inflation rate.

The Council's national data should be good news for those seeking corporate support for state and local projects. United Way reports increased corporate giving at the community level. Our friends in Texas, Oklahoma, Louisiana, and Colorado may report that the economy makes it impossible to obtain corporate support; yet Texas A & M received over $21 million in 1986-87 from corporations and contributions to the University of Texas Longhorns, Oklahoma Sooners, and L.S.U. Tigers athletic programs remained strong. The good news is the bad news is wrong....to borrow a phrase from Ben Wattenberg.

People manage corporations and people continue to voluntarily support programs and institutions which deserve support. Junior Achievement support increased from $25 million to $50 million in the last five years. Contributions to the Joint Council on Economic Education increased $1.8 million to $3.2 million in the last five years.

George Brakeley, Jr., in my opinion the nobel laureate of fund raising, said, "You can't fish when the fly is in the boat, and you can't raise money without asking for it. Like milking a cow, you've got to sit right down and go to work" ... and that is exactly what we (those who are responsible for economic education) must begin to do. We must begin to devote more time and resources to increase our corporate support. We can increase corporate support if we are willing to (1) devote more time to fund raising, and (2) discipline ourselves to follow the "Vince Lombardi Rule."

Many of us would be able to enhance our economic education programs if we could expand our financial resources. We are often reluctant to devote the time or resources to establish a strong fund raising program. Yet, economic educators--those who understand "markets," sales presentations, management, and rewards--should be competing successfully in the philanthropic marketplace.

If we want to compete successfully for corporate support we must be willing create viable partnership. Brakeley noted in his Tested Ways to Successful Fund Raising that "cultivation in the fund raising sense is not personal ingratiation. It is the heightening of interests in the cause at hand--in other words--, education." Based on Brakeley's observation, economic educators should excel in the philanthropic marketplace. Who is more capable to take the cause--economic education--to the corporate community?...and who is better prepared to educate their potential supporters?

Assuming we are willing to devote more time and resources to develop partnerships with the corporate community, do we have the discipline to follow the Vince Lombardi Rule?" First, we need to be clear that all of us are following the same disciple; Vince Lombardi the great coach for the Green Bay Packers and the Washington Redskins. Lombardi is legend among those who believed that there is value in striving for success...and Lombardi was successful.

Lombardi believed that his players must master the fundamentals if they were to achieve success. Though each of his players were champion athletes, "stars," "all-league," "all-state," "all conference," "all-American," Lombardi stressed fundamentals--blocking and tackling. Lombardi realized that even champions must constantly practice--and thus, master the fundamentals.

The fundamentals for achieving strong corporate support at the state and local level can be mastered by every economic educator who has the desire to share his or her program with community and business leaders. The formula for mastering fundamentals is 3I + A + R = $!

1. Identify your corporate prospects.
2. Inform your corporate prospects.
3. Involve your corporate prospects.
4. Ask your corporate prospects for support.
5. Recognize your corporate supporters.

Identify your corporate prospects. Ask others for recommendations. Does the corporate decision maker have an interest in economic education? Does the business leader participate in community activities? Can the corporation contribute at a desirable level?

Inform your potential corporate supporters. Develop a document which provides the potential supporter with basic information. What? Who? Why? and How? What are you doing. Who is doing it to whom? Why are you doing whatever it is you're doing? How are you doing what you're doing? Inform with fact, data, and quote those involved in the program, e.g. teachers and students.

Involve your corporate supporters. Create a business advisory team. Invite business owners to participate through panel discussions and lectures. Take educators and students on tours of businesses. Ask for advice...and listen! Create internship and mentor programs. Give voluntarism a high priority! Establish a career day.

Ask for support. Visit the prospect to determine areas of mutual interest. Ask if you can submit a proposal between $X and $Y for B project. Submit a solid proposal and request an opportunity to visit for the purpose of discussing the proposal.

Recognize your supporters. Recognition, recognition...we all love recognition.

Frances M. Kelley, former manager for special education programs at IBM noted, "Corporate fund raising is not easy; it requires a good deal of skill and persistence. It is important to have a corporate strategy so that your energy is directed to those companies where there is some likelihood of mutual interest." Kelley gave these tips on corporate fund raising:

1. Do your homework. Research the company, not only its philanthropic interests, but also the nature of its activities as described in its annual report.
2. Look into how the institution can serve the needs of business. Reach out in terms of program development. Establish advisory boards or committees and involve business people where it makes sense.
3. Get to know the giving officer or community relations manager, if you can. Make an appointment--don't just drop in. When you come to a meeting with a corporate representative, be prepared to talk about a variety of programs.
4. Above all, listen. Try to read between the lines of what the grants person is telling you. Sometimes significant clues are given indirectly. And don't challenge the company's giving philosophy, even if you disagree with it.
5. Try to be brief. Respect the person's time constraints. Bring some background material to leave behind--especially a case statement, some general statistics, something that is easy to read and easy to digest.

The NFIB Foundation and the Joint Council will cosponsor two fund raising workshops for economic educators in 1989. Perhaps these workshops could become annual events. Good luck in your efforts to enhance economic education, and may your tambourines be full of gold coins.

David Jones is President of the NFIB Foundation.

Chapter Twenty

A MODEL PARTNERSHIP PROGRAM

By Mary P. Scopatz

Business Week is a fast-paced one-week conference, for students and teachers, designed to stimulate curiosity and provide insights about business and the free enterprise system. Members of top management from business and industry lend from a few hours to a full week to share their professional expertise and experiences. Students are invited to study with them and engage in thought-provoking conversation about our competitive market system.

The week-long format includes films, panel discussions, small group lectures, full-assembly presentations, field trips and games--all designed to give participants a candid and interesting look at business. Students are also divided into groups of twelve to form competitive companies, each with their own advisor. The students select a name for their "company," design a company logo, and develop their own product/service market plans, complete with company commercials. Each company must make management decisions while participating in a computer game that simulates actual business situations.

Business Week is designed to provide students who have completed the 10th or llth grade with information on our private enterprise economic system. Business Week is a nationwide program currently being offered in 20 states. A curriculum, which includes a computer "game" that enables students to start up and operate a "business" during this short period of time, was developed by representatives of the business community.

Business Week speakers are all from the business community, as are Company Advisors. Company Advisors make a week-long commitment to Business Week. Each is assigned to a "company" made up of 12 students. Company Advisors are owners, chief operating officers, or top management people. Company Advisors guide students during the week by reviewing with them the message of each speaker, the relationship between the speaker's presentation, and the curriculum, including the computer game.

Each speaker makes a commitment to speak on a specific topic that relates to the curriculum and for which he/she was chosen as a recognized expert. Topics for the one-hour sessions include:

- Supply and Demand
- Marketing/Advertising
- Research, Development, Quality Control
- Cost, What Is It?
- Resources
- Capitol
- The Work Force
- Management
- Facing Facts About Energy
- Money Interest Rates
- Business as a Member of the Community
- Why Businesses Fail
- The Business Computer
- Understanding the Stock Market
- Business' Responsibility in Politics
- Capitalism, Socialism, Communism
- How to Get a Job
- Educational Opportunities
- Business, An Exciting Experience
- Challenges
- "You're Great"
- Do it Right the First Time
- Self Esteem--The Need for a Positive Self Image

Students and teachers are recruited through the local high schools. Applications and information are sent to the principal, who must approve the applications before they are submitted. Participants attend on scholarships provided by the local business community. Each $250 scholarship provides room, board, and materials for the week. Participants pay a $25.00 nonrefundable registration fee.

The following are student comments on their experiences at Business Week:

> "I gained more in-depth information about American businesses and how they are run. Some of the topics chosen for lectures were things that I've studied in business education classes and yet I always found out one or more points that weren't covered in the classes I've taken."
>
> "I gained a much broader perspective of the decisions, investments, problems, strategies, and profits involved in promoting a business. Also, before I got here I considered a business job to include only a desk and paper; now it appears as a career in decision making, dealing with people, and advancing with new computers and machinery."

The following comment from one of the teachers who attended summarizes the general feeling of teacher attendees:

> "During Business Week I have gained a new perspective of the business community and the important role each business plays in our community. This was a unique opportunity to hear ideas from top business people in our state. I wish every individual citizen in our state could participate in such a week."

Both students and teachers were able to earn credit for Business Week. School districts allowed 2 1/2 units of elective summer school credit for students while teachers were able to earn 3 quarter units of extension credit from University of California, Santa Barbara. Business Week is a model partnership program supported and taught by the business community to assist youth and teachers to better understand how our private enterprise economic system works.

Mary Scopatz is Director of the Santa Barbara Industry Education Council.

Chapter Twenty-One

COMPARATIVE ECONOMIC SYSTEMS: TEACHING THROUGH OVERSEAS TRAVEL

By Lawrence W. Reed

The matter of Comparative Economic Systems figures prominently in economics curricula around the country. At the college level, courses by that designation are standard fare. In high schools, considerable attention is typically given to such things as "how the Soviet economy works," "the Swedish welfare state," and "capitalism vs. socialism." The subject is almost always approached from a heavily empirical standpoint, focusing on what is supposedly really going on in actual places around the world. This at least is how it was taught to me and how I taught it myself at the college level on more than one occasion.

After over 3 years now of extensive travel to some 22 countries, and to some of them several times, I'm firmly convinced of something I used to only strongly suspect: Textbooks are to comparative economic systems what bumper stickers are to philosophy. Actually being there adds whole new dimensions to the subject, explodes one stereotype after another, and often leaves the traveler wondering how on the textbook author could have written what he did.

Textbooks on comparative economic systems are, for the most part, plagued with one or both of these problems: an anti-market bias or material so outdated that it's no longer applicable. There are recent texts out there, for instance, that extol the supposed successes of Yugoslavian "worker-socialism," despite Yugoslavia's widespread economic problems.

Freeing myself of full-time teaching commitments in 1984, I decided to see as much of the world as my time and resources would permit, with the first visit being to the Soviet Union in March 1985. I wanted to find ou how a number of foreign economies "worked," what natives thought about their economic lot, and especially what day-to-day life was like for at least some of them.

My trips have never been long, usually just one-two weeks, and some have proven far more productive and instructive than others. Even the short space of a week in a place like Poland taught me more than I could have learned from a dozen texts. The experiences lend themselves to lectures far more animated--far more interesting to the student--than I could ever muster from the armchair in my living room. Whether or not an experience validated what I had earlier read in print, being able to recount the details and put them in a broader theoretical context is an extremely effective teaching tool.

Consider first, the Soviet Union. I have chaperoned three student groups to that country. Soviet tour guides would prefer to keep a short leash on visitors. They want you to spend your time at the souvenir shops or touring museums and art galleries. What the tour guides hope you don't notice, and what the typical text says little or nothing about, is the vast, murky world of the black market. I have learned from experience, though, that illegal but victimless, capitalist activities are pervasive.

I have never had to seek out encounters with the black market while in Moscow, Leningrad, and nearby places. The black market came to me and to every participant in our tour groups and on so many occasions that I have come away each time astonished at its prevalence. It did not matter how many times we declined to buy or sell; these relentless, repressed entrepreneurs hit us up time and time again. Russian taxi drivers sometimes whisper an offer of a discounted fare in return for payment in dollars. Other Russians pitched us for almost every article of clothing we had and offered everything from military caps to Russian flags to hand-painted jewelry boxes in return.

From a young friend in Leningrad, I have learned volumes about the black market. I'll refer to him here as Constantin, a fictitious name. Constantin earns about 400 rubles a month, but less than a quarter of it is legal. The rest he earns by marketing contraband books, video tapes, and other items smuggled in from the West.

Three years ago he bought a car for about 8,000 rubles--a rare private possession in the "workers' paradise." So the authorities would not question where he got the money, he had his father get it in his (Constantin's) name. The father had worked at a good job for 25 years and could be expected to have the necessary funds.

Besides, the older man is a member of the Communist Party. A six-month driver education course is required before a license is issued. Constantin himself is teaching his wife to drive and she will not be taking the official course. When I asked how she could then get a license, he replied with a phrase used commonly in Russia, "I have connections."

Soviet dentists seldom use a painkiller when simply pulling a tooth. It isn't part of the state-prescribed procedure. But Constantin, like many others, pays his dentist a little extra under the table. Many dentists have their own illegal private practice during off-hours, and that's when the quality of care goes up and the Novocaine comes out of the closet.

American movies on video tape are circulating within the underground economy in Russia, too. Newsweek reported in August 1986 that "Rambo" was among the most popular at that time, selling for the equivalent of $430. Constantin has seen it twice and loves it. Though things may have loosened up now, the penalty in mid-1986 for possessing "Rambo" was as high as three years in jail, and much worse if you got caught making profit by selling admissions to a private showing.

Constantin has told me that he is not untypical, that practically everybody in the Soviet Union has some activity, some "business," something going on the side which the government doesn't approve of. The network of illegal transactions is a major component of whatever the Soviet GNP is, but you would not know that by reading textbooks in America. These are things one learns by going there, taking a few minor risks, getting off the beaten tourist path, and making friends with ordinary citizens.

Pervasive as the underground economy is in the Soviet Union, it is easily surpassed by that of neighboring Poland, where a full-fledged, alternative society functions. This "parallel Poland" comes complete with private, illegal versions of virtually every aspect of "legal" life--including the press, radio, education theater and the arts, health care and even insurance.

Solidarity's Wiktor Kulerski outlined the parallel society when he wrote: "This movement should create a situation in which authorities will control empty stores, but not the market; the employment of workers, but not their livelihood; the official media, but not the circulation of information; printing plants, but not the publishing movement; the mail and telephones, but not communicationss; and the school system, but not education." And that's precisely what Poles have done on a grand scale.

I visited Poland for a week in November 1986. Though my methods and contacts were risky and not advisable for every teacher-tourist, it would not be difficult for almost anyone to manage a safe glimpse of this productive underside of Polish life.

At a dinner party one evening in Krakow, hosted by several underground printers, I was dazzled with the scope of what my hosts called "independent publishing ventures." They had translated and printed works by Alexander Solzhenitsyn, Irving Kristol, Michael Novak, George Orwell, Milton Friedman and Ayn Rand, among others. I was able to smuggle two works out of the country: Orwell's Animal Farm and Novak's The Spirit of Democratic Capitalism.

Seven illicit publishing houses in the country together produce 200 books a year in editions of up to 10,000. When the government recently mounted a campaign to confiscate the cars of people caught distributing the stuff, the publishers banded together and formed their own underground insurance company, assessing themselves premiums according to the perceived risk of confiscation.

Meanwhile, entire "underground universities" flourish in the major cities, holding classes in the most unlikely places: warehouses, basements, churches and even in the state's own university buildings after hours. On the black market, Poles are producing and trading everything from vodka to automobiles. Numerous people trade zlotys for dollars at three and four times the legal rate. Rumor has it in Warsaw that even private banks; private interest on deposits have sprung up. The Polish economy is a splendid example of what I call "involuntary privatization."

Economist Hernando de Soto of Peru has written and spoken extensively on this matter of black markets, with a particular focus on Latin America. One of his themes is that this phenomenon is far too pervasive to ignore. If it were not for the black market, he says, many Latin economies would look like stone age basketcases. The same is true of the socialist economies of the Soviet Union and Eastern Europe, yet texts on comparative economic systems overlook the actions of the countless people who daily operate outside the formal economy. To get that kind of information into texts, it is vital that the authors actually go to the,places they're writing about, with pen and paper and tape recorder in hand.

Now to a different genre. During the years I taught economics full-time, 1977-84, one of the topics which most interested me was inflation, particularly the many cases in history of runaway hyperinflation. There are plenty examples of it going on around the world right now. First-hand observation provides an excellent introduction to inflation and its effects on the economy.

In 1985, I went to Bolivia, which at that time was suffering from an inflation rate of anywhere between 10,000 percent and 50,000 percent, depending upon whose figures one trusted. As a result, when I talk about hyperinflation in a class now, it has a whole new dimension. I am able to share details from hours of interviews with peasant farmers, street people, businessmen, university professors and government officials. When your money is evaporating at those horrendous rates, everybody wants to talk about it.

Dinner for three at a hotel in La Paz came to 23 million Bolivian pesos. Hotels demanded payment once a day, no matter how long the stay, and wouldn't quote tomorrow's rate until tomorrow arrived. A shoe shine would cost 25,000 pesos one day and 50,000 the next. Pay telephones, built years ago to accommodate the standard 10-peso coin, presented a problem: most people had to find someone with a stash of the old coins and then buy them as "tokens" for about 5,000 times their face value. Cocaine traffickers in Cochabamba bought new BMWs with cash, delivered in 30 or 40 large sacks in the back of a pick-up truck. Plainly, seeing all this firsthand, taking plenty of slides, and recording dozens of interviews, would provide almost any instructor with hours of lively, memorable lecture materials.

Overseas travel has immeasurably augmented by ability to get across to students an understanding of how markets work and the impact that government policies can have upon them. Many teachers will be happy to learn, it can cost very little if you do it right. Several private tour companies, for instance, actually assemble tour packages which allow the teacher/chaperone to go free for simply signing up a small number of students.

My bottom line is this: for teaching comparative economic systems, some overseas travel by the instructor should be a prerequisite. To rely on a text and a text alone is a disservice to the subject and to the students. Bachelors don't make good marriage counselors and medical students don't really begin to be good doctors until they've been interns. There just isn't any good substitute for being there.

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Chapter Twenty-Two

ESOP: EMPLOYEE ECONOMIC EDUCATION TOOL

By William H. Peterson

Why are there today some 9,000 employee stock ownership plans (ESOPs) involving--and I use the word advisedly--some nine million working Americans? And why is an ESOP a learning tool with important political as well as economic education potential? I raise these questions from the viewpoint of an economic educator, one especially concerned with employee economic education and the future of freedom and free enterprise in America and across the globe. There is quite a method in the ESOP methodology. While any one ESOP is not certain to succeed, it still has a big learning and earning incentive going for it--employee ownership.

Aristotle laid down the key educational method 2,300 years ago: We learn best by doing, by being, by living out our choices for--let me add--better or worse, for richer or poorer. We learn--frequently the hard way--that experience is indeed the best teacher, that it is almost inconceivable, for instance, that you could learn how to dance, or how to swim, play bridge, write an essay, play a harmonica, or bake a pie without actually trying out these things first-hand, without getting hands-on experience--without, in the case of learning how to swim, actually getting into a swimming pool, getting your feet wet and a whole lot more.

And so it is, to a large degree, in the case of economic education. We can thank Marilyn Kourilsky of the UCLA School of Education for pointing out this truth in her brilliant and most successful Kinder-Economy idea. This is the idea of getting school children to learn economics by doing, by owning--by themselves operating their own cameo enterprises, obtaining credit, buying supplies, producing goods and services, utilizing advertising, merchandising goods, selling to customers, turning a profit, incurring a loss, making all sorts of business trade-offs, and so on. Directly. Enthusiastically. That's involvement. That's learning!

Look at the Kourilsky idea from the point of view of a company employee who's taken a typical high school or college course on micro- or macroeconomics--and hated it. The employee is now a parent visiting a child involved in a Kourilsky Kinder-Economy at a local elementary school. What does the parent see? The parent sees kids running, on a miniature basis, real businesses operating in real marketplaces. And enjoying it. Then the employee-parent recalls that hated economics course and compares it with what he sees. No instructor's talking head here, no abstract concepts, no inert data, no obtuse formulas, no voice droning on, no squirming around wearily in one's seat, no eyes glazing over the propounding of some arcane economic theory, no yawning one's boredom or indifference, for instance, to an explanation of the indifference curve.

Involvement-involvement, doing-doing, learning-learning--that's the ticket. And that employee-parent is ripe for an ESOP as an economic education tool. As an ancient Chinese axiom puts the idea: Tell me and I forget, show me and I remember, involve me and I learn.

The Harvard Business School approaches this idea with its famous case method. The graduate student is handed an assignment, a case write-up. The student is told about, say, Ed Smith, CEO of the XYZ Company. The XYZ firm, already at flat-out production, with its equipment increasingly in need of repair, runs out of inventory just as Ed Smith receives a lot of rush orders, etc., etc. How do you, Mr. or Ms. MBA Candidate, assuming that you are Mr. Smith, solve the problem?

Good approach, Harvard Business School, but no cigar. The case method is still role-playing, not the real thing. Justice Oliver Wendell Holmes saw the impact of reality, of the school of hard knocks. He put the learning-by-doing concept this way: "Your education begins when what is called your education ends."

Involvement, then, is the key. Personally coming to grips with a real problem. Coping with a trade-off, some personal dilemma. As Samuel Johnson noted in 1777: "Depend on it, Sir, when a man knows he is to be hanged in a fortnight it concentrates his mind wonderfully."

Involvement, let me reiterate, is more than mere observation, more than watching a drama unfold on a stage, more then role-playing or play-acting. It's reality, it's life itself, it's you in the center of things, it's your money or equity on the barrelhead, it's you in the pursuit of happiness, on the firing line, alert to your incentives, making, if not always hard, fateful choices--and, by the same token, fateful rejections.

Ludwig von Mises called this ineluctable choosing process, this system of methodological individualism, this life essence of purposeful behavior: praxeology, the science of human action--action impelled by human choices, by human incentives. All right. Enter direct employee involvement, the employee stock ownership plan movement of today--ESOPs by the thousands, involving employees by the millions. Involved, as I say, in political as well as economic education. Employees more likely to apprehend and see through the not uncommon portrayal of labor versus management, of worker versus capital, of labor exploitation, of industrial classes--as propagated by Karl Marx, Thorstein Veblen, and so on.

For America is not a class society. It's a free enterprise private-property meritocracy. Everybody is free to choose. Free to move up. Or, for that matter, free to move down. And, significantly, free to vote. It's up to the individual, in and out of the company. That's the secret of American prosperity--harnessing individual progress to national progress, individual incentives to national aspirations. This is Adam Smith's famous Invisible Hand idea of 1776--by more than happy coincidence the very same year in which Americans declared their independence from Britain.

This is the idea of self-interest, frequently organized into a company, working for the public interest, the common good. Voluntarily. Without compulsion. An extraordinary idea. Vindicated by more than 200 years of experience in America and across the world, even after recent bitter experiences with communism in places like China and the Soviet Union, where leaders such as Deng Xiaoping and Mikhail Gorbachev are now trying to restructure their economies along more market-oriented lines.

This is also employee economic education in action everywhere--if the action is perceived and properly explained. A pretty big if, unfortunately. For economics, especially economic policy, is still encumbered and distorted by all sorts of myths.

Interestingly, we discuss this matter of employee economic education on the eve of a Presidential election, at a time when our two national parties are engaging in a battle for the minds of the voters. One issue in the campaign, for instance, is mandated employee benefits. Benefits like a higher minimum wage, unpaid parental leave, employee health insurance, comparable-worth wage standards, and so on. To me, the larger issue is one of, again, employee economic education, in particular, of the law of opportunity costs, of the principle of no free lunch. The question is: Does the employee understand this principle?

Does the employee see that mandated benefits amount to back-door taxes, to impositions on business to underwrite an employee "entitlement" in this form or that? Does the employee comprehend that while the politicians get the glory the consumers and wage-earners wind up paying the back-door taxes? Does the employee realize that in the case of a higher minimum wage, hundreds of thousands of entry-level workers will also pay special-back-door taxes--in terms of joblessness? By government decree?

So, I ask: More and bigger mandated employee benefits? And my answer to employees everywhere, and to members of Congress and other candidates on the hustings: Remember, if you will, that income arises only from work, from production, that the flip side of those mandated benefits are inevitable and frequently unseen trade-offs, implicit costs, adverse repercussions.

Thus, with any mandated benefit enactment, either prices go up to play havoc with inflation and American competitiveness at home and abroad, or take-home wages go down to play havoc with employee and employer choice as to just how to adjust individual compensation packages to meet particular conditions and local situations. For given free employee choice, many an employee would choose--I'm tempted to say, most employees would choose--greater take-home pay rather than some mandated benefit dreamed up in Washington.

I touch on the mandated employee benefit issue only to emphasize the urgency, in a democracy, of employee economic education, of the need for the employee to see more readily that there is indeed no free lunch, that every benefit has, inescapably, a cost.

So I seek to point up here this remarkable ESOP learning tool available to employers and employees in the world of private enterprise. For American business, a field of gold not much tapped.

The field is vast, around 100 million private sector employees in this country alone, nearly 70 million of them working for business firms that could utilize ESOPs. As noted, ESOPs already cover some 9 million employees. So that leaves, if my arithmetic is right, around 60 million employees still available for ESOP coverage.

The way an ESOP works is for the company to fund an ESOP with annual contributions in stock or cash. The amount of a contribution varies with factors, the main factor being the size of the company's profits. These contributions are held in an ESOP trust, commonly a trust company, and are vested to the employees over time.

Each employee is assigned an individual ESOP account, and contributions to his or her account are usually based on a percentage of salary. Let's say that employee Jane Jones has a salary of $30,000 and that the company declares an ESOP contribution at 5 percent of payroll. Thus Jane Jones' ESOP account would be credited with $1,500.

What are corporations doing about ESOPs, and why? Obviously, with the ESOP movement well on its way, employers and employees are increasingly finding the plans mutually advantageous. The ESOP company sees the employee stock ownership plan as a program giving employees a beneficial stake of ownership in the firm. It sees the employee as a co-owner, a co-capitalist, a partner and stakeholder in the company's equity and profits.

The ESOP employer also sees that the employee is now directly and symbiotically involved, much more so then an ordinary shareholder, and hence more likely to view the corporation as a whole, as an enterprise, as a dynamic complex of problems and opportunities in a competitive world. Employee involvement, participation, learning, teamwork, and application to the job should follow. The employee tends to realize that he/she has something to lose as well as gain, tends to acquire a company perspective, even something of an entrepreneurial mind.

Another ESOP advantage to the company is tax-deductibility for contributions to an ESOP. Under the Employee Retirement Income Security Act of 1974 (ERISA), the company obtains a strategic employee benefit plan without putting a great strain on cash flow. In addition, its dividends paid on ESOP stock are also tax-deductible. Moreover, it gets other tax incentives in leveraged ESOPs, which reduce the cost of borrowing funds inasmuch as principal and interest payments are completely tax-deductible.

One rub with ERISA: With an ESOP, like any other qualified employee benefit plan, the company must file annual report form 5500 with the U.S. Department of Labor's Pension and Welfare Benefits Administration (PWBA). PWBA monitors these reports for fiduciary responsibility and takes action against irregularities.

From the company's viewpoint, how do ESOPs compare with profit-sharing? Profit-sharing, while advantageous in a number of ways, is essentially ad hoc; involvement is less complete; identification with the employer is not as thorough. In profit-sharing, the employee has an interest in profitability, in loss and cost avoidance, but the employee still has no equity, no stake, no pride of ownership, nothing, if need be, to sell in the market or will on to his/her heirs.

ESOPs are unique in other respects as well. ESOP assets are required by law to be invested primarily in the stock of the company. As the company moves in value so too does the value of the ESOP stock. Productivity gains translate into ESOP stock gains. Losses into losses. In other words, value for value. The connection to the employee should be plain. Another advantage to the company is that the ESOP can serve as collateral to borrow money at low cost to finance an expansion or acquisition. Such an ESOP is termed a "leveraged ESOP." To be sure, this advantage comes only if the employees sooner or later get contributions to the ESOP equal to the amount of money borrowed by the ESOP. This arrangement spells joint interest--the employee's and the company's.

Practically all these perceptions of ESOP advantages as well as the employee stock ownership plan itself are traceable to one man central in the history of ESOPs. That man is Louis Kelso, a San Francisco lawyer, investment banker, and the inventor of the modern ESOP. In 1958 Kelso and philosopher Mortimer Adler coauthored The Capitalist Manifesto, a book based on the premise of binary or two-factor production. The two factors are labor and capital.

Argue Kelso and Adler: Let's seek to meld these two factors together in terms of ownership. Let's strengthen the private-property bond of the free enterprise system. Let's supplement the employee's work-related income with capital-related income. The authors thereby give the case for an ESOP, which Louis Kelso had already successfully put into play for Peninsula Newspapers, a West Coast chain.

There are other individuals important to the history of ESOPs. One is Russell Long, who for years was chairman of the Senate Finance Committee and much impressed by the Kelso-Adler Capitalist Manifesto argument. In the early 1970s Kelso testified before the Long Committee and made the case for widening the employee base of capital ownership through tax incentives for ESOPs.

In any event, the ESOP movement was on its way. As were leveraged ESOPs, which account for around a third of the ESOPs, but more in dollar volume and number of employees than nonleveraged ESOPs. Leveraged ESOPs permit a wide range of partial or complete employee buyouts of a company, from, say, five percent to 100 percent. Consider examples of two 100 percent employee leveraged ESOP buyouts, Weirton Steel and Avis Car Rental.

In 1984 the employees of Weirton Steel at Weirton, West Viginia, took control of the company in a $386-million leveraged buyout from National Steel. Results have been spectacular--18 consecutive profitable quarters, even if the timing of the buyout coincided with an upward turn of the steel cycle. Employment at Weirton has climbed from 6,800 to 8,200. Union relations--which had been bad at National's big money-losing Weirton mill--are today smooth and harmonious: Why, after all, would anybody want to strike against himself? Weirton Steel CEO Robert Loughhend attributed the company turnaround to "growing involvement by our employee-owners which has resulted in significant cost savings."

The Avis leveraged ESOP buyout came in 1985 at a cost of $1.75 billion. It involved 3,900 Avis locations around the world and all 11,000 employees in the United States but not those in 134 other countries. The financing was accomplished by GMAC and a consortium of banks and insurance companies. GMAC's interest stemmed from Avis buying 70,000 GM vehicles a year.

Avis had gone through ten corporate owners since its founding in 1946 by Warren Avis, who saw the future of car rentals as a vital accessory to airline travel. In 1962 Avis found its slogan. By then, Avis CEO Robert Townsend, who said in response to a query on how Avis differed from Hertz: "We're No. 2. We try harder." Today the motto reads: "We owners try harder."

Apparently employee-owners do try harder. In 1982 Hertz, No. 1, made $212 million in profits and had a 38 percent market share; Avis made $102 million with a 23 percent share. In 1987 Hertz made $188 million on a shrunken 32 percent market share while employee-owned Avis climbed to $177 million on a 28 percent market share. Avis may yet become No. 1.

Weirton Steel and Avis Car Rental are 100 percent-employee-owned ESOP success stories, but ESOPs are human institutions and so have their fiascos and shortcomings, too. For instance, an ESOP company can lose money just like any other company. And it can fail just like any other company. Moreover, with all or most all of its investment eggs in one basket, the value of an ESOP trust fund can take a bad turn for its employee-owners.

For example, the biggest leveraged ESOP ever in the United States was created on September 17, 1987, when Hospital Corporation of America sold 104 hospitals for $2.2 billion to HealthTrust Inc. The ESOP transaction came about a month before the stock market crash and was financed almost entirely with debt and preferred stock. Obviously the HealthTrust Inc. employees saw the value of their trust assets fall sharply, even if today those asset values have come back some with the ongoing economic expansion and market recovery. So, too, with the employees of Lowe's Co., who own 25 percent of the big North Carolina-based building-materials retailer. They saw the market value of their ESOP stock drop last year by

43 percent, from a high of $332 million in 1987 to a post-crash low of $189 million. Yet on a year-to-year basis the Lowe's ESOP stock gained. Indeed, in an article entitled "ESOPs Take a Bath" in Pensions & Investments Age of November 2, 1987, Lowe's and five other ESOP companies--CF & I Steel, Colt Industries, FMC Corp., Michigan National Bank, and Transcon Corp.--were criticized for losing an aggregate of $410 million in the value of their ESOP holdings in the Crash. But further analysis reveals that the aggregate value of these six company ESOPs gained an average of 20.5 percent for 1987 as a whole while the Dow-Jones 30 Industrial averaged only a 9.9 percent gain. And again in the first half of 1988 these same ESOP holdings--minus Colt Industries, which was bought out by management--outperformed the profits of the Dow-Jones 30 Industrial by a factor of nearly four.

Still, another ESOP shortcoming is that employee-owners can occasionally be denied voting opportunities. This means employees have ownership but no say, no participation, in the running of the company. In addition, an ESOP can be foisted on the employees without so much as a hint of what's happening to them. Thus ESOPs have sometimes been used purely to thwart takeovers. In 1983, for example, Dan River Inc., although it did consult its employees, created an ESOP to stop raider Carl Icahn. The ESOP paid $158 million for the bulk of Dan River shares while the executives bought the remainder. The ESOP shares were entirely voted by management. The employee-owners had no say.

Another problem with an ESOP has been some management failure to follow up an employee takeover with an employee economic education program, as both Avis and Weirton have done. Employee economic education is not automatic with an ESOP. Involvement is there but it has to be capitalized.

ESOP employee-owners are frequently unschooled on the nature of the free enterprise system--that it is a loss as well as a profit system, that companies can fail as well as prosper, that costs have to be contained, that quality control is essential, that price competition is the watchword, that customer satisfaction is critical, and so on.

Nonetheless, ESOPs can be a strategy and a strength for the private enterprise system in the United States and around the world. ESOPs are being used in places like Egypt and Italy, Japan and South Korea, Spain and Britain, Costa Rica and Guatemala. In Guatemala, for example, the La Perla coffee plantation adopted an ESOP strategy a few years ago to better fend off communist guerrilla attacks. Now the La Perla employee-owners have driven the communists off their land. They have a stake in the place where they work and in the freedom of their country.

British Prime Minister Margaret Thatcher has used ESOPs most advantageously in Britain's vast privatization movement. Look at the $5 billion stock offering of once 100-percent state-owned British Telecom, for example, in which a sizable fraction of the shares were set aside for British Telecom employee purchase. Now those employees have become capitalists and a powerful constituency against some future Parliament seeking to renationalize the company.

That is the broad ESOP strategy--the steady democratization of capital--that is taking hold here in America. Thomas Jefferson dreamed of a country of small farmers, shop keepers, and merchants. A country of capitalists. Abraham Lincoln signed into law the Homestead Act in the vision that the western prairies would become a land of independent, producing property-owners. And today nearly 50 million individual American stockholders have a stake in corporate America. That stake is being escalated by the ESOP movement, adding a new source of capital expansion--ESOP savings, ESOP credit. I see a bright future for the employee stock ownership plan, an employee economic education tool with an ability to shape employee thinking on behalf of freedom and free enterprise.

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Chapter Twenty-Three

ECONOMICS IS HUMAN ACTION

By Bettina Bien Greaves

Economics is human action. That is, economics is the study of the actions of people, individuals. Each is unique, with his or her own particular wants, ideas, values, goals. The science of economics, therefore, is the study of how people act, how they change their environment to cope with situations, to accomplish their various ends, and to create or produce the many things they want to have and use. Thus, the goal of economists is to study actions. It is not to study the material goods and services people produce or the commodities they trade in the pursuit of their various goals.

The World Before Men

To appreciate the importance of the actions of men, consider what the world was like before there were people to act. Then look at the world in which we now live. Before human beings appeared on earth, there were mountains, oceans, rivers, deserts, lakes, and so on. There were various living creatures, fish in the seas, birds in the air, and animals and reptiles on land and sea. But none of these had the urge or the ability to alter their environment in any way.

Various theories have been put forward to explain how thinking, reasoning men developed. But how is not important for our purposes. What is important is the fact that thinking, reasoning men did develop. And their ability to think and to reason leads them to have ideas and make changes in the attempt to better their situation.

At first, individuals used their capabilities simply to upgrade their food, clothing, and shelter. But in time they turned their thoughts and reason to making more elaborate changes. They invented tools, which speeded up and increased production. And they began make to "luxury" items that weren't necessary for mere survival. Over time, people have actually changed the shape of the world in many ways. They have moved mountains, literally. They have erected huge structures. They have extracted ores from the ground to make vehicles, tools, machines, and appliances. They have dammed and diverted water from lakes and rivers, and fertilized the soil to make it yield more food than ever before. They have worked with chemicals to make new combinations, "miracle drugs," anesthesias, antiseptics, pesticides, disinfectants. And they continue to bring about changes.

Production

Mankind cannot create anything, in the metaphysical sense of making something out of nothing. They can only alter in one way or another whatever they find in nature--by moving natural resources around, applying heat, cold, pressure, or combining some resources with others. All the complex tools and machines, modern conveniences, massive structures, and so forth, that we enjoy today are the products of the actions of countless men who turned their thoughts and reason to moving things around, to modifying their environment in various ways to improve their conditions.

It seems obvious that men should strive to better their condition. But it is no explanation to say simply that something is "obvious." To answer that question, consider the fundamental nature of man and the reasons why he acts.

Every Action is a Trade

Everyone has needs, wants, goals, values, desires, some more urgent than others. But everyone has only limited, time, energy, resources. There is a huge gap between what we have and what we wants. Therefore, each of us is constantly faced with having to decide how best to use his limited resources, how best to "ration" them to satisfy his most urgent wants, to avoid wasting them on less urgent wants, or to ward off the most pressing uneasiness or most dangerous threat to his well-being. We must make decisions, choices. Once we satisfy one want or need, a new one becomes the most urgent goal.

Every action is a trade-off of one good or service for another, of one situation for another. In this sense, all changes throughout the ages have been "trades," whether they were of clay pots for copper kettles, wheat for money, a vacation trip for air conditioning, a dangerous situation for a safer one. Thus all actors bidding and asking are "traders." Everyone is always participating, in one gigantic, community-wide, on-going auction. Or in many smaller auctions, separated by natural and man-made obstacles.

Every trader bids something he has and asks for something he prefers. Whenever two traders exchange goods and services voluntarily, both traders gain. Each expects to receive something in trade that he values more than what he gives up. Barring force, fraud, and/or human error, therefore, both are better off after the trade than before. In this way, goods and services are continually being moved from owners who value them less to would-be owners who value them more. And in the process, insofar as trades are voluntary, conditions are improving from the point of view of the traders.

Through the bids and asks of countless traders over centuries, land has been transferred from one owner to another, oceans have been explored, continents have been developed, resources have been sold by owners to producers, raw materials and labor have been acquired by manufacturers and transformed into tools, machines, and finished goods. And these final products have then been purchased by consumers.

Economic development has by no means always been continuous and steady. Wars, catastrophes, natural and man-made disasters have destroyed valuable property and interrupted economic progress. Nevertheless, when we compare the goods and services we have today with those available to our ancestors it is obvious that the voluntary bids and asks of countless market participants have led to tremendous feats of production. The assortment of goods and services available today is the result of the countless bids, asks, trades, and actions of individuals throughout the ages. In the process, goods and services have been transferred round and round on the market, from suppliers, to producers, to consumers, and so on back and forth.

The Bids and Asks of Traders Lead to Prices

The bids and asks of countless individuals are responsible for physical production. But they are also responsible for nonphysical phenomena such as prices, profits, losses, money, interest rates, the success or failure of businesses, and so on. To understand the role these play in economic development, it is important to understand how each stems from the actions of numerous individuals.

Using reason and logic, the economist starts with the simple fact that man acts in the attempt to improve his situation. Certain conditions are essential, however, before individuals will attempt to act. They must have an idea about what to do; they must have hope that their actions will be successful; and they must have whatever resources, time, and energy are necessary in order to act. The would-be actor encounters many natural obstacles. But if ideas, hopes and means are also frustrated by manmade obstacles, trades will be discouraged and economic development lag. The lesson economics teaches, therefore, is to avoid interfering unnecessarily with voluntary trades among men.

Explanations of the role and effects of actions begin with the fact that everyone has many wants, values, and goals, some more pressing than others. Individuals are active agents, not passive objects buffeted about by market forces. People are not neutral with respect to their environment. They cannot accomplish all their goals at once. They have only limited time, energy, and resources. Everyone aims at goals and acts purposively. Because we value some things more than others and want them sooner, we are willing to bid more and work harder for them than for things we value less.

An individual starts acting when he selects the want or goal he considers most pressing or most urgent at the moment, and devotes resources, time, and energy to accomplishing it. But he is not alone in the world. Other individuals, many of whom may value the same goods and services, may be competing with him in bidding for them. The economist who has reasoned this far from the fundamental fact that men act, can now use these fundamental principles to interpret what goes on in the market economy, to explain prices and production. Let's take a specific example.

Individual Values Spur Production and Affect Prices

A few years ago, several big oil companies studied the oil situation and recognized a growing demand for oil on the part of consumers in the United States. Many consumers and would-be consumers were asking urgently for oil to heat their homes and to run their cars. Because of the urgency of their demand and the relatively limited supplies, the consumers and would-be consumers, who were competing with one another, bid up the prices for oil then being offered on the market. In addition, some of these oil companies foresaw the possibility that Mideast oil imports might soon be disrupted.

The higher oil prices had far-ranging effects. They sent signals to consumers persuading them to economize, to devote oil to only their most urgent wants, and to look for substitutes. Some consumers insulated their homes, bought smaller cars, switched to diesel fuel, and drove less. The higher oil prices also sent signals to oil companies to increase production. They explored for oil within U.S. borders and made plans to develop the oil reserves they found on Alaska's North slope.

To embark on this new project, oil companies needed additional workers, equipment, and supplies. So they appeared on the market with savings or credit as new bidders for goods and services. To attract geologists and engineers skilled in exploring for and developing oil fields, they had to offer higher salaries. They had to bid more for construction materials and workers to erect living quarters on the North Slope. They had to bid higher prices for oil drilling equipment, trucks and truck drivers, planes and pilots to deliver machinery and supplies to the newly constructed camps on the North Slope. They bid up the wages of construction workers and roustabouts who were willing to build roads, and pipelines in the Arctic cold. Wages and salaries in Alaska rose rapidly.

A world event, the threatened Mideast Crisis, had persuaded U.S. oil companies to try to expand oil production here at home. Their new project altered the pattern of production and prices in this country and elsewhere. Oil company job offers withdrew some workers and materials from the market in the lower 48 States. As a result, the prices bid and asked for certain kinds of labor, tools, machines, and supplies tended to rise in the lower 48 states as well as in Alaska. So did the prices of the goods and services bought by the workers and producers of these tools, machines, and supplies. As a result, would-be buyers of many other goods and services had to economize.

Like the ever widening ripples made when a stone is thrown into a quiet lake, the oil companies' increased demand for men and materials had worldwide repercussions. The ripples were not always easy to trace, for the market is huge and the pattern of world prices and production complex. Yet the effects of the oil companies' new ventures were nonetheless real and far-reaching. But changes are always taking place on the market. Individuals adjusted, adapted and came up with new ideas, new products and the supplies of, and demand for, oil and other products kept shifting.

Oil eventually flowed from the North Slope through the newly constructed pipeline to consumers in the lower 48 States. By that time, conservation efforts of consumers had had a noticeable effect on demand. More people were driving smaller cars that got better mileage per gallon of gas. Many had installed more effective insulation in their homes. They had learned to economize and to satisfy their most pressing needs with less oil. Also, the Oil Petroleum Marketing Countries, after restricting production in the attempt to raise prices, began once more to increase production. Additional gallons of gasoline began to enter the U.S. market. But the values of the consumers had changed. Their most urgent demands for gasoline were being satisfied by fewer gallons, so that additional gallons were wanted for less pressing wants only. People were unwilling to bid the same high price per gallon for oil to satisfy these less important goals.

Production is not Automatic

There is nothing automatic about production. Every production project is sparked by the idea and the action of some particular individual. The market prices of the various goods and services, which serve as guides to would-be producers, stem from the ever-changing subjective values and choices of consumers who buy, or refuse to buy. Nothing is ever inevitable or certain about the market and production. As personal values change, so do all market phenomena.

Before production of any commodity is started, in this case, oil, some individual must have an idea. He must then try to decide whether his project will be worthwhile. He speculates as to whether there will be a market for his output when it is available sometime in the future. He tries to anticipate the wants of consumers. On the basis of the latest prices available, he tries to estimate the prices consumers will pay when his product actually becomes available. He explores various techniques of production and alternative uses for the needed factors of production. If some factor he needs should prove more valuable to consumers in another use, another would-be producer is likely to frustrate his efforts by offering higher prices for it and raising his costs. Thus he must always investigate potential costs and alternative production methods in the attempt to keep his costs below what consumers will be willing and able to pay.

Unhampered Market Prices Reflect the Subject values of Traders

Traders engage in countless transactions every day. Every trade reflects the bids and asks of traders on the basis of their respective subjective values. Prices evolve as ratios between things, services, commodities, and other economic goods, on the one hand, and money, on the other. Insofar as these prices are free-market prices, not distorted by artificial, govermnent regulations, subsidies, and/or restraints, they represent the relative subjective values of all market participants. Free market prices are reliable indications of the wants and values of all traders. They are not set arbitrarily or mechanically on the basis of costs. Rather they stem from the subjective values of individuals. A high price for something indicates a shortage relative to the demand of would-be buyers. This could be due either to a natural disaster or to a governmnent policy that has restricted supply. But the important message that a high price delivers to consumers is to economize, to conserve. And it tells producers it could be profitable to expand.

A low price for something indicates that it is available in ample supply, as compared with the demands of bidders on the market. Perhaps a new source has been discovered, or a new technology has made its production easier and/or cheaper. But the important message that a low price for something delivers to consumers is that they need no longer be so frugal and may use the item more lavishly. It tells producers it is no longer so urgent to expand and perhaps they should even contract production.

The study of economics explains that the signals emitted by prices reflect the subjective values of those who are bidding and asking on the market. The supplies that come on the market and the demands of consumers are the consequences of the actions and choices of people. Interfering with their freedom to act, to choose, to work, to produce, to trade will threaten production and the welfare of persons throughout the world. Recognition of the fact that economics is human action teaches that when individuals are free to pursue their respective wants, goals, and values without interference, so long as they do not violate the equal freedom of others, the results will be consistent with human nature and social cooperation. Production, and respect for the rights of individuals will be encouraged. And the trend will be toward economic prosperity and peaceful relations throughout the trading area.

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